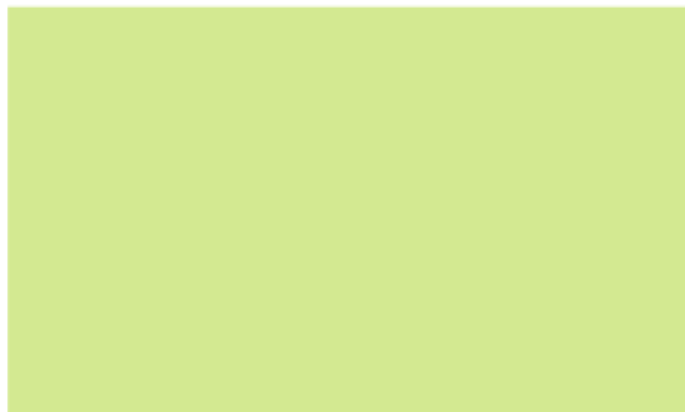


# 10

## Cost of Providing Nutritional Support for: People living with HIV, Adults receiving TB treatment, Orphans and vulnerable children and Pregnant women



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## ABBREVIATIONS AND ACRONYMS

ART	antiretroviral therapy
COMPAS	Commodity Movement Processing and Analysis System
CSB	corn-soya blend
DOTS	directly observed treatment short-course
DSC	direct support costs
EMOP	emergency operation
FANTA	food and nutrition technical assistance project
FAO	Food and Agriculture Organization
ISC	indirect support costs
ITSH	internal transport storage and handling
LTSH	landside transit shipping and handling
MML	maize meal
MT	metric tonne
ODOC	other direct operating costs
OMB	Asia region
OMC	Eastern Europe and Central Asia region
OMD	Western Africa region
OMJ	Central, Eastern and Southern Africa region
OMP	Latin America and Caribbean region
OMS	Sudan region
OVC	orphans and vulnerable children
PLHIV	people living with HIV
PMTCT	preventing mother-to-child transmission
PRRO	protracted relief and recovery operation
Q+Q	quality and quantity
TB	tuberculosis
TSH	internal transport, storage and handling
UNAIDS	Joint United Nations Programme on HIV/AIDS
WFP	United Nations World Food Programme
WHO	World Health Organization
WINGS	WFP Information Network & Global System (WFP ERP system)

## EXECUTIVE SUMMARY

This report provides an updated estimate of the unit costs to provide food and nutritional support to people living with HIV, pregnant mothers, adults with tuberculosis (TB) on directly observed treatment short-course (DOTS), and orphans and vulnerable children. The cost estimates, in addition to commodity costs, also include the costs of transport, logistic and programming support.

Current estimates show that providing food assistance and nutritional support for HIV programmes costs the following:

- US\$ 0.43 a day can provide three wholesome meals to orphans and vulnerable children.
- US\$ 0.64 a day can provide nutritional support to a child living with HIV who is newly enrolled in antiretroviral therapy.
- US\$ 0.70 a day can provide nutritional support to an adult living with HIV who is newly enrolled in antiretroviral therapy.
- US\$ 0.70 a day can provide nutritional support to an adult tuberculosis patient newly enrolled in anti-TB medication through directly observed treatment short-course.
- US\$ 0.78 a day to provide nutritional support to a non-HIV positive mother in food-insecure environments, aimed at healthy pregnancy and sustained lactation.
- US\$ 0.83 a day can provide nutritional support to a mother living with HIV, as a component of prevention of mother-to-child transmission.

Global daily cost of food assistance and nutritional support				
Client Type	Category	Duration of support (days)	\$/client/duration of support (USD)	\$/client/day (USD)
<b>OVC</b>	Support	365	154.98	0.43
<b>Child ART</b>	Treatment	180	114.81	0.64
<b>Adult ART</b>	Treatment	180	126.24	0.70
<b>TB</b>	Treatment	270	168.33	0.70
<b>Pregnancy and lactation</b>	Prevention	540	421.20	0.78
<b>PMTCT</b>	Prevention	540	448.13	0.83

Data were obtained from 48 World Food Programme (WFP) programmes in 42 low- and middle-income countries for 2008 and 2009. Standardized food packages were created to meet the nutritional needs of each client group. The ration design reflects not only those food products most commonly used and distributed in established WFP programmes, but also followed the World Health Organization (WHO)/Food and Agriculture Organization (FAO) and WFP recommendation for macronutrient balance. These rations provide 10-12% of total energy from protein and 17% of energy from fat and offer on average 80-85% of the total kilocalories required daily.

The commodity costs, on average, accounted for about 55% of the total costs, while the transit costs accounted for about 30%. Thereby, any future change in fuel and transportation prices would have an impact on the overall unit cost. Despite the food and fuel crisis that caused increases in both commodity and transportation costs in 2008, on average, we observed prices returning almost to pre-crisis levels.

This report highlights the fact that providing nutritional support around HIV programmes is both necessary and affordable. At the same time, there is also a need to continue to monitor costs and further refine and validate the cost estimates at the country level. The unit costs are provided to inform programme managers of the average daily cost per client that can be used for programmatic purposes and also to project future resource needs.

## INTRODUCTION

This report provides an updated estimate of the unit costs to provide food and nutritional support to people living with and/or impacted by HIV and TB. Costs were estimated for the following groups:

- Adults receiving antiretroviral therapy (ART)
- Children receiving ART
- TB patients on directly observed treatment short-course (DOTS)
- Pregnant women (to promote healthy pregnancy and sustain lactation), HIV-positive women, to prevent mother-to-child transmission (PMTCT), and women in food-insecure conditions
- Orphans and vulnerable children (OVC)

Food rations were designed to meet the nutritional needs of each client type based on FANTA,<sup>1</sup> FAO,<sup>2</sup> UNAIDS,<sup>3</sup> WHO<sup>4</sup> and WFP<sup>5</sup> guidelines. The cost estimates, in addition to commodity costs, also include transport, delivery, logistic, and programming expenses.

### Country selection

Data were obtained from 48 WFP programmes in 42 low- and middle-income countries (Appendix A). Country selection was based on similar criteria used in the 2006 study. These criteria include having an established WFP operation during 2008 and having issued a standardized project assessment for the operation that year. In addition, countries had to have at least one HIV/AIDS or TB nutritional programme in which a portion of the programme targeted people living with HIV (PLHIV) or TB, defined by recording the number of PLHIV or TB patients impacted, respectively.

A total of 42 countries met the above-mentioned criteria (40 for HIV/AIDS and 23 for TB) with some countries having multiple programmes (see Table 1).<sup>6</sup> Compared to the previous study, the 2010 update includes more countries in Asia and Eastern Europe in the analysis, thus allowing for more representative regional estimates.

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<sup>1</sup> Food and Nutrition Technical Assistance (FANTA) Project (2008). *Nutrition Care for PLHIV Training Manual for Community and Home-Based Care Providers: Participant Handouts*. FANTA Project, Academy for Educational Development. Washington, DC.

<sup>2</sup> FAO, WHO & UNU. (2004) *Human energy requirements: Report of a joint FAO/WHO/UNU expert consultation*. 17-24 October 2000. FAO, Rome.

<sup>3</sup> UNAIDS (2008). *Children and AIDS: Third Stocktaking Report, 2008*. UNAIDS, Geneva.

<sup>4</sup> WHO (2003). *Nutrient requirements for people living with HIV/AIDS. Report of a technical consultation*. World Health Organization, Geneva.

<sup>5</sup> WFP (2008). *Food Assistance in the Context of HIV: Ration Design Guide*. WFP, Rome, July 2008.

<sup>6</sup> The previous 2009 study included 18 countries and 12 programmes in its data collection and analysis.

Table 1. Countries with HIV or TB Programmes

<b>Asia</b>	<b>Latin America and Caribbean</b>	Liberia	Kenya
Afghanistan	Haiti	Mali	Lesotho
Cambodia	Honduras	Mauritania	Madagascar
India	<b>West Africa</b>	Niger	Malawi
Lao PDR	Benin	Sierra Leone	Mozambique
Myanmar	Burkina Faso	Sao Tome and Principe	Rwanda
<b>Sudan</b>	Central African Republic	<b>East, Central, Southern Africa</b>	Somalia
Sudan	Chad	Congo	Swaziland
<b>Eastern Europe and Central Asia</b>			United Republic of Tanzania
Georgia	Côte d'Ivoire	Burundi	Uganda
	Ghana	Djibouti	
Russian Federation	Guinea-Bissau	Democratic Republic of the Congo	Zambia
Tajikistan	Guinea Conakry	Ethiopia	Zimbabwe

## Commodity selection

The commodity selection reflects not only client nutritional requirements set by FANTA,<sup>7</sup> FAO,<sup>8</sup> UNAIDS,<sup>9</sup> WHO<sup>10</sup> and WFP<sup>11</sup> guidance, but also those food products most commonly used and distributed in established WFP programmes. Data were extracted from the standardized project reports for the programmes that served PLHIV, PMTCT, OVC and/or TB clients in the 42 selected countries. Vegetable oil, fortified corn-soya blend (CSB), beans, and maize were found to be the most frequently used commodities by WFP in their programming. The food rations were created using the above items and following internationally accepted nutritional guidelines for each client type.<sup>12,13</sup> The fortified CSB is assumed to satisfy client micronutrient requirements.<sup>14</sup> In addition to these four commodities, OVC packages have sugar included to enhance taste, which is believed to increase food consumption for children.<sup>15</sup>

<sup>7</sup> Food and Nutrition Technical Assistance (FANTA) Project (2008). *Nutrition Care for PLHIV Training Manual for Community and Home-Based Care Providers: Participant Handouts*. FANTA Project, Academy for Educational Development. Washington, DC.

<sup>8</sup> FAO, WHO & UNU (2004). *Human energy requirements: Report of a joint FAO/WHO/UNU expert consultation*. 17-24 October 2000, FAO, Rome.

<sup>9</sup> UNAIDS (2008). *Children and AIDS: Third Stocktaking Report, 2008*. UNAIDS, Geneva.

<sup>10</sup> WHO (2003). *Nutrient requirements for people living with HIV/AIDS. Report of a technical consultation*. World Health Organization, Geneva.

<sup>11</sup> WFP (2008). *Food Assistance in the Context of HIV: Ration Design Guide*. WFP, Rome, July 2008.

<sup>12</sup> For the purpose of supporting PLHIV or TB, each ration included maize meal instead of maize, as milled cereals often require less time and energy to prepare, reducing preparation and consumption challenges.

<sup>13</sup> WFP (2008). *Food Assistance in the Context of HIV: Ration Design Guide*. WFP, Rome, July 2008.

<sup>14</sup> The CSB is fortified to meet one unit of the recommended dietary allowance per day.

<sup>15</sup> WFP (2008). *Food Assistance in the Context of HIV: Ration Design Guide*. WFP, Rome, July 2008.

## Ration design

In previous studies, generalized rations included only maize meal, vegetable oil and CSB. In addition to these, in this model beans have been included in all packages, based on findings that most 2008 WFP programmes had beans in their packages and because they also provide nutritional diversity for clients, which is much needed.<sup>16</sup> Each ration followed the WHO/FAO<sup>17</sup> and WFP<sup>18</sup> recommendation for macronutrient balance, providing 10-12% of total energy from protein and 17% of energy from fat.<sup>19</sup>

The rations typically provided by WFP do not fully support the client's daily energy needs. They offer, on average, 80-85% of the total kilo-calories required daily.<sup>20</sup> This is done in an effort to prevent dependency of the client and/or household and to avoid shocks when food support is discontinued.<sup>21</sup> This assumption is also maintained in the costing model.

Recent studies have found that PLHIV require more energy than their counterparts who are not HIV positive, suggesting that adults with AIDS need 10-30% more energy per day.<sup>22</sup> While the energy requirements are higher if people are symptomatic, we assume in this model that all patients are asymptomatic and therefore need 10% increased energy.<sup>23</sup> A 10% increase in a healthy adult's 2100 kcal energy requirements translates into a total of 2,310 kcal per day. The daily amount provided to the client to avoid dependency issues results in a total of 1,858 kcal per day (around 80% of total need). The guidance indicates that the nutritional requirements for TB programmes should not differ from those for PLHIV, so the TB patients have the same ration design as adults enrolling on ART.<sup>24</sup> Table 2 shows the food ration and caloric value of the adult ART and TB clients on DOTS rations.

Table 2. Daily food ration for adults on ART or TB clients on DOTS

Adult ART or TB daily ration				
Commodity	Quantity (grams)	Energy (kcal)	Protein (grams)	Fat (grams)
BEANS, DRIED	50	167.5	10	0.6
CORN-SOY-BLEND	50	188	8.6	3.45
MAIZE MEAL, FORTIFIED	350	1281	29.75	5.95
OIL, VEGETABLE	25	221.25	0	25
<b>Total</b>		1857.75	48.35	193.4

<sup>16</sup> WFP (2008). *Food Assistance in the Context of HIV: Ration Design Guide*. WFP, Rome, July 2008.

<sup>17</sup> FAO, WHO, UNU (2004). *Human energy requirements: Report of a joint FAO/WHO/UNU expert consultation*. 17-24 October 2000. FAO, Rome.

<sup>18</sup> WFP (2008). *Food Assistance in the Context of HIV: Ration Design Guide*. WFP, Rome, July 2008.

<sup>19</sup> WFP (2008). *Food Assistance in the Context of HIV: Ration Design Guide*. WFP, Rome, July 2008.

<sup>20</sup> Previous models were based on the assumption that all PLHIV required 2,100 kcal of energy per day.

<sup>21</sup> WFP (2008). *ART Desk Review, WFP Support to ART Programmes: Benin*. WFP, Rome, October 31, 2008.

<sup>22</sup> WHO (2003). *Nutrient Requirements for PLHIV*. WHO, Geneva, 13-15 May 2003.

<sup>23</sup> WFP (2008). *Food Assistance in the Context of HIV: Ration Design Guide*. WFP, Rome, July 2008.

<sup>24</sup> WFP (2007). *Getting Started: WFP Assistance in the Context of Tuberculosis Care and Treatment*. WFP, Rome, September 2007.

HIV-positive children require a 10% increase in daily energy intake compared to children without HIV.<sup>25</sup> The daily energy needs of a seven-year-old without HIV are approximately 1,779 kcal.<sup>26,27</sup> When accounting for the extra energy required, it was calculated that the average asymptomatic child on ART would require 1,956 kcal per day. This model thus provides a daily ration of 1,662 kcal to children on ART. As shown in Table 3, the ration is divided into portions, as eating large meals is often difficult for children who are chronically ill.<sup>28</sup>

Table 3. Ration for children on ART, divided into three portions

Child ART meal 1				
Commodity	Quantity (grams)	Energy (kcal)	Protein (grams)	Fat (grams)
BEANS, DRIED	50	167.5	10	0.6
MAIZE MEAL, FORTIFIED	170	622.2	14.45	2.89
OIL, VEGETABLE	12	106.2	0	12
<b>Total</b>		895.9	24.45	15.49
Child ART meal 2				
Commodity	Quantity (grams)	Energy (kcal)	Protein (grams)	Fat (grams)
BEANS, DRIED	25	83.75	5	0.3
MAIZE MEAL, FORTIFIED	100	366	8.5	1.7
OIL, VEGETABLE	10	88.5	0	10
<b>Total</b>		538.25	13.5	12
Child ART meal 3 (CSB to water ratio = 1:5, or 250 ml of water for 50 grams CSB)				
Commodity	Quantity (grams)	Energy (Kcal)	Protein (grams)	Fat (grams)
CORN-SOY BLEND	50	188	8.6	3.45
SUGAR	10	40	0	0
<b>Total</b>		228	8.6	3.45

<sup>25</sup> WFP (2008). *Food Assistance in the Context of HIV: Ration Design Guide*. WFP, Rome, July 2008.

<sup>26</sup> Swindale A, Ohri-Vashaspati P (2005). *Measuring Household Food Consumption: A Technical Guide*. Food and Nutrition Technical Assistance Project, Washington, DC, 2005.

<sup>27</sup> According to recent surveys the average age of ART initiation for children in resource-limited setting is between five and nine years of age. This study used the median age of seven for costing purposes from: Janssens B et al (2007). Effectiveness of highly active antiretroviral therapy in HIV-positive children: evaluation at 12 months in a routine program in Cambodia. *Pediatrics*, 120 (5):1134-40 and Reddi A et al (2007). Preliminary outcomes of a pediatric highly active antiretroviral therapy cohort from KwaZulu-Natal, South Africa. *BMC Pediatrics*, 7:13.

<sup>28</sup> WFP (2008). *Food Assistance in the Context of HIV: Ration Design Guide*. WFP, Rome, July 2008.

Mothers trying to support a healthy pregnancy have unique energy needs beyond the average healthy woman. In order to support a healthy pregnancy, an additional 285 kcal per day is recommended for women, regardless of their HIV status.<sup>29</sup> Following delivery, an additional 500 kcal, on top of a normal daily diet, is recommended in order to sustain proper lactation (see Table 4).<sup>30</sup>

Table 4. Ration to support healthy pregnancies for food-insecure mothers

Ration for women, for 6 months during pregnancy				
Commodity	Quantity (grams)	Energy (kcal)	Protein (grams)	Fat (grams)
BEANS, DRIED	75	251.25	15	0.9
CORN-SOY BLEND	75	282	12.9	5.18
MAIZE MEAL, FORTIFIED	350	1281	29.75	5.95
OIL, VEGETABLE	25	221.25	0	25
Total		2035.5	57.65	37.03
Ration for women, for 12 months during lactation				
Commodity	Quantity (grams)	Energy (kcal)	Protein (grams)	Fat (grams)
BEANS, DRIED	75	251.25	15	0.9
CORN SOY BLEND	65	244.4	11.18	4.49
MAIZE MEAL, FORTIFIED	400	1464	34	6.8
OIL, VEGETABLE	30	265.5	0	30
Total		2225.15	60.18	42.19

The caloric requirement for PMTCT clients takes into account their average energy as an adult, plus the energy required for pregnancy or lactation, plus the 10% increase in energy required due to their HIV-positive status. The energy requirement for pregnant, asymptomatic women was calculated to be 2,164 kcal per day, and increases to 2,384 kcal per day for lactating, asymptomatic women. Table 5 depicts the rations for PMTCT over the duration of 18 months of support, divided into two stages: 6 months during pregnancy and 12 months during lactation.

<sup>29</sup> Seume-Fosso E et al (2004). *Food and Nutrition Technical Assistance. HIV/AIDS: a Guide for Nutritional Care and Support*. Food and Nutrition Technical Assistance Project, Washington, DC, October 2004.

<sup>30</sup> WFP (2008). *Food Assistance in the Context of HIV: Ration Design Guide*. WFP, Rome, July 2008.

Table 5. PMTCT rations for pregnancy and lactation

PMTCT ration, for 6 months during pregnancy				
Commodity	Quantity (grams)	Energy (kcal)	Protein (grams)	Fat (grams)
BEANS, DRIED	100	335	20	1.2
CORN-SOY BLEND	75	282	12.9	5.18
MAIZE MEAL, FORTIFIED	350	1281	29.75	5.95
OIL, VEGETABLE	30	265.5	0	30
Total		2163.5	62.65	42.33
PMTCT ration, for 12 months during lactation				
Commodity	Quantity (grams)	Energy (kcal)	Protein (grams)	Fat (grams)
BEANS, DRIED	100	335	20	1.2
CORN-SOY BLEND	85	319.6	14.62	5.87
MAIZE MEAL, FORTIFIED	400	1464	34	6.8
OIL, VEGETABLE	30	265.5	0	30
Total		2384.1	68.62	43.87

Rations for OVC have been designed to be given as part of in-school feeding programmes. The average age of OVC in sub-Saharan Africa is just under nine years old;<sup>31</sup> the average energy requirement for children of this age is 1,829 kcal per day.<sup>32</sup> OVC were the only clients provided with 100% of their daily food requirements based on guidance from WFP and the previous recommended food ration.<sup>33</sup> The ration for this model, shown in Table 6, contains approximately 1,882 kcal.

<sup>31</sup> WFP (2008). *Getting Started: Programming Food Assistance for Orphans and Vulnerable Children*. Rome, November 2008.

<sup>32</sup> Seume-Fosso E et al (2004). *Food and Nutrition Technical Assistance. HIV/AIDS: a Guide for Nutritional Care and Support*. Food and Nutrition Technical Assistance Project. Washington, DC, October 2004.

<sup>33</sup> WFP (2006). *Cost of Nutritional Support*. Rome, April 2006.

Table 6. OVC ration, divided into three portions

OVC main meal				
Commodity	Quantity (grams)	Energy (kcal)	Protein (grams)	Fat (grams)
BEANS, DRIED	50	167.5	10	0.6
MAIZE MEAL, FORTIFIED	150	549	12.75	2.55
OIL, VEGETABLE	15	132.75	0	15
Total		849.25	22.75	18.15
OVC additional meal				
Commodity	Quantity (grams)	Energy (kcal)	Protein (grams)	Fat (grams)
BEANS, DRIED	50	167.5	10	0.6
MAIZE MEAL, FORTIFIED	150	549	12.75	2.55
OIL, VEGETABLE	10	88.5	0	10
Total		805	22.75	13.15
OVC porridge (CSB to water ratio = 1:5, or 250 ml of water for 50 grams CSB)				
Commodity	Quantity (grams)	Energy (kcal)	Protein (grams)	Fat (grams)
CORN-SOY BLEND	50	188	8.6	3.45
SUGAR	10	40	0	0
Total		228	8.6	3.45

Assuming that a portion of the client's food ration will be shared by their family, a household complement is provided to all clients, with the exception of OVC who are fed at school. Assuming an average household composition of five people, including the client, the four household members apart from the client would encounter a total daily food shortage of 980 kcal.<sup>34,35</sup> Using the fortified blended food of CSB, a household complement which supports the four others at home amounts to 261 grams. This is assumed for ART, PMTCT and TB programming only.<sup>36</sup> The daily household complement in Table 7 is depicted below.

Table 7. Daily household complement

Daily household complement				
Commodity	Quantity (grams)	Energy (kcal)	Protein (grams)	Fat (grams)
CORN-SOY BLEND	261	981.36	44.892	18.009
Total		981.36	44.892	18.009

<sup>34</sup> FAO (2006). *Intensity of Food Deprivation*. Food and Agriculture Organization, Rome.

<sup>35</sup> FAO country-specific analysis of the food deficit of undernourished populations found a shortage of 245 kcal per person per day in sub-Saharan Africa.

<sup>36</sup> United States Agency for International Development (1999). *Commodities Reference Guide*. USAID, Washington, D.C.

## Duration of food support

The duration of food support for each client in the model was also based on WFP guidance. For both adults and children on ART, the duration of food support is 180 days per beneficiary. According to WFP, the first three months of food support is intended to assist the patients to recover their nutritional status for improved efficacy and compliance with the drugs. The next three months are intended to stabilize the patients on the regimen and assist the patients in a critical phase before they are back to a productive life and finally self-reliant.<sup>37</sup>

The provision of food support for women enrolled in PMTCT programmes from food-insecure households is recommended for the entire duration of the programme (18 months).<sup>38</sup> The model assumes that support would begin by at least month three of pregnancy, and then continue for 12 months following birth, during lactation.<sup>39</sup>

For TB clients and OVC, the length of support was based on data extracted from 2008 WFP programmes in the study. The average duration of nutritional support for TB patients was found to be approximately 8 to 10 months – the model assumes 9 months of support. OVC nutritional support programmes had an average duration of 12 months and were often re-enrolled in the next year.

## Standardized food ration

Table 8 shows the standardized food ration created for each client, including the additional household complement where applicable. Each package takes into account the amount of each commodity in the ration, the number of individuals in the household being supported, and the duration of food support.

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<sup>37</sup> WFP (2006). *Cost of Nutritional Support*. Rome, April 2006.

<sup>38</sup> WFP (2006). *Cost of Nutritional Support*. Rome, April 2006.

<sup>39</sup> Food and Nutrition Technical Assistance (FANTA) Project, WFP (2007). *Food Assistance Programming in the Context of HIV*, FANTA Project, Academy for Educational Development, Washington, DC.

Table 8. Standardized food ration by model

<b>Adult ART beneficiary</b>							
Commodity	Total quantity (grams)	Feeding days	Grams of commodity	Tonnes of commodity	% of food basket		
BEANS, DRIED	50	180	9000	0.009	6.7		
CORN-SOY BLEND	311	180	55980	0.05598	42.2		
MAIZE MEAL	350	180	63000	0.063	47.5		
OIL, VEGETABLE	25	180	4500	0.0045	3.3		
<b>Tonnes of food basket per new ART client</b>				<b>0.13248</b>			
<b>TB beneficiary</b>							
Commodity	Total quantity (grams)	Feeding days	Grams of commodity	Tonnes of commodity	% of food basket		
BEANS, DRIED	50	240	12000	0.012	6.7		
CORN-SOY BLEND	311	240	74640	0.07464	42.2		
MAIZE MEAL	350	240	84000	0.084	47.5		
OIL, VEGETABLE	25	240	6000	0.006	3.3		
<b>Tonnes of food basket per new TB client</b>				<b>0.17664</b>			
<b>Child ART beneficiary</b>							
Commodity	Total quantity (grams)	Feeding days	Grams of commodity	Tonnes of commodity	% of food basket		
BEANS, DRIED	75	180	13500	0.0135	12.2		
CORN-SOY BLEND	311	180	55980	0.05598	50.7		
MAIZE MEAL	270	180	48600	0.0486	44.1		
OIL, VEGETABLE	22	180	3960	0.00396	3.5		
SUGAR	10	180	1800	0.0018	1.6		
<b>Tonnes of food basket per new child ART client</b>				<b>0.1103</b>			
<b>PMTCT beneficiary</b>							
Commodity	Total quantity (grams)	Feeding days	Total quantity (grams)	Feeding days	Grams of commodity	Tonnes of commodity	% of food basket
BEANS, DRIED	100	180	100	360	54000	0.054	0.1168
CORN-SOY BLEND	336	180	336	360	185040	0.1850	0.4003
MAIZE MEAL	350	180	400	360	207000	0.207	0.4478
OIL, VEGETABLE	30	180	30	360	16200	0.0162	0.0350
<b>Tonnes of food basket per new PMTCT client</b>						<b>0.462</b>	
<b>OVC Beneficiary</b>							
Commodity	Total quantity (grams)	Feeding days	Grams of commodity	Tons of commodity	% of food basket		
BEANS, DRIED	100	360	36000	0.036	25.9		
CORN-SOY BLEND	50	360	18000	0.018	12.9		
MAIZE MEAL	300	360	108000	0.108	77.9		
OIL, VEGETABLE	25	360	9000	0.009	6.4		
SUGAR	10	360	3600	0.0036	2.5		
<b>Tonnes of food basket per new OVC client</b>				<b>0.1386</b>			

## Determining unit cost

### Commodity costs

Commodity costs were calculated using the weighted averages of actual purchases by the selected countries. In-country delivery costs are assumed to be highly dependent on the size of the operational context in which HIV/AIDS activities were placed.<sup>40</sup>

### Transport and logistic costs

Commodities could either be procured internationally, and therefore be subject to external transportation and then internal country transportation, or procured locally, in which case they were only subject to internal transportation.

In the case where food is procured internationally, there are two modes of transportation that can be used. Food can be delivered either via ocean freight or it can be moved via land freight, such as rail or trucking, or both. In the case of ocean freight, the rates include the freight and port handling as well as the port costs. Figure 1 shows the various transit scenarios that commodity shipments may take.

Figure 1. International transportation scenarios

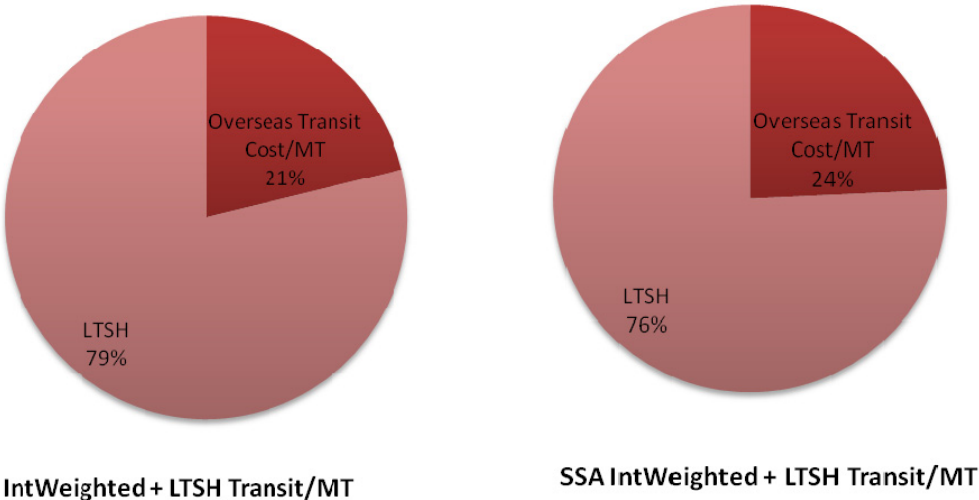
<input type="checkbox"/> The commodity was sourced from overseas to a landlocked nation and therefore it would be charged the sum of an international sea voyage, an international land transport cost, and finally a local domestic transport cost.
<input type="checkbox"/> The commodity was sourced from overseas to a country that had a port and would therefore be charged the sum of an international sea voyage and a local domestic transport cost.
<input type="checkbox"/> The commodity was sourced internationally but travelled only over land. In this case, it would be charged the international land component and the local domestic transport cost.

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<sup>40</sup> Using a detailed purchase order form in WFP's WINGS procurement database, commodity purchase orders in the 42 countries were extracted. Purchase orders entered into the system between 1 January 2008 and 13 August 2009 were used. This time period was selected since there is a delay from a commodity being purchased or donated in kind and the time when it is made available to the country programmes. Data through to the end of 2009 is not yet available and is therefore excluded. In addition to the cost of buying food, there is also a cost to monitor the quality of food received. These costs are termed quality and quantity (Q + Q) control and they pay for a sub-contractor to verify that the food is usable after shipment and remove any spoilage or unusable product. Based upon the WFP Procurement Services (2010) food procurement manual, a Q + Q survey takes place immediately prior to WFP taking over ownership of the goods. Q + Q survey fees have been added into the unit cost. Q + Q data were extracted from WFP consignment overviews for 2008 and 2009 and were weighted by total MT procured. Appendix B shows the regional cost for commodity quality checking.

Internal domestic transportation is only comprised of the costs which are accrued from the arrival of the commodity shipment at the nation’s border. This would be the cost to move the commodity from one domestic source location to the WFP domestic storage location. The final transit cost is moving the commodity from the storage facility to the distribution point where it is delivered to the client. All of these various transit costs are accounted for in the unit cost components. The graphs below depict the proportion of transit costs coming from international and local transit, globally and for sub-Saharan Africa. In both cases, the majority of transit costs were incurred from domestic landside transit storage and handling (LTSH). For more information on transit data see Appendix C.

Figure 2. Proportion of transit costs coming from international and local transit, globally and for sub-Saharan Africa (SSA).



**Direct support costs and other direct operating costs**

Direct support costs account for the human capital required to run these programmes, as well as the in-country facility and infrastructure capital costs. These costs covered all staff on payroll whether they were directly related to HIV/AIDS or TB programming or not (Appendix D).<sup>41</sup>

<sup>41</sup> Since WFP does not provide disaggregated data for the proportion of financing put towards each project’s objectives (i.e. HIV, TB, OVC) in the standardized project reports, documented direct support costs are likely to be an overestimation.

## Indirect support costs

Indirect support costs (ISCs) were calculated using WFP’s corporate standard rate of 7% of total operating costs. These accounted for expense items, such as legal services and human resource management, conducted on behalf of the programmes but expensed directly at the headquarters level.<sup>42</sup>

## Results and discussion

In Table 9 below, individual components and final cost are expressed as a \$USD rate per metric tonne (MT) of food delivered at the global level.<sup>43</sup> The transit and direct costs are assumed to be the same, regardless of client type. The indirect costs vary, as they are based on commodity prices.

Table 9. Individual and final costs for nutritional support packages by client type

	Food package \$/MT	Int weighted + LTSH transit/MT	Q+Q/MT	DSC/MT	ODOC/MT	ISC/MT	Total \$/MT of food package
Adult ART	510.9653974	295.1781023	4.59090196	67.84754	12.011773	62.34156	<b>952.9352754</b>
Child ART	592.82658	295.1781023	4.59090196	67.84754	12.011773	68.07184	<b>1040.526741</b>
PMTCT	526.4272023	295.1781023	4.59090196	67.84754	12.011773	63.42389	<b>969.4794066</b>
OVC	665.3789835	295.1781023	4.59090196	67.84754	12.011773	73.15051	<b>1118.157813</b>
TB	510.9653974	295.1781023	4.59090196	67.84754	12.011773	62.34156	<b>952.9352754</b>

Figures 3 to 7 show the proportion of each of the cost components that make up the global cost for each client type. The commodity costs, on average, account for about 55% of the total costs, and transit costs for about 30%. This indicates that changes in fuel prices could have a major impact on the overall unit cost.

<sup>42</sup> Appendix E shows regional ISC by model.

<sup>43</sup> Appendix F shows details of the regional total \$ per MT of food package in each model.

Figure 3. Global unit cost - adult ART

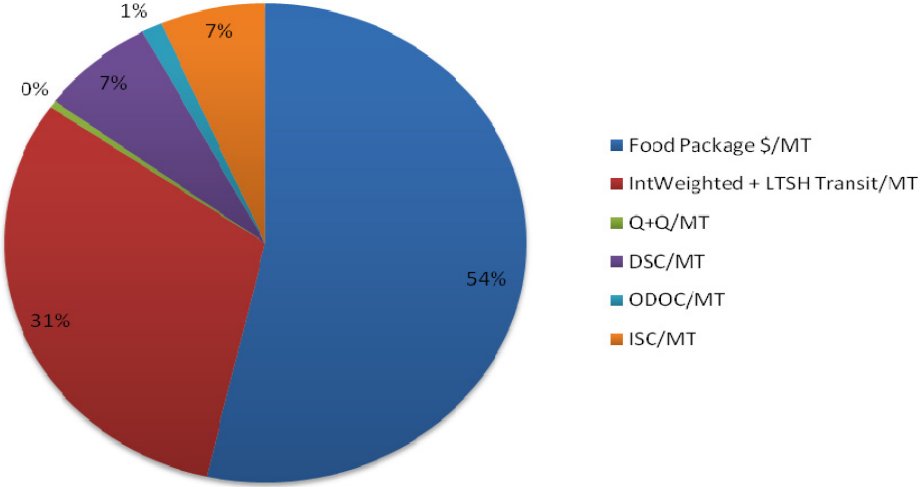


Figure 4. Global unit cost - child ART

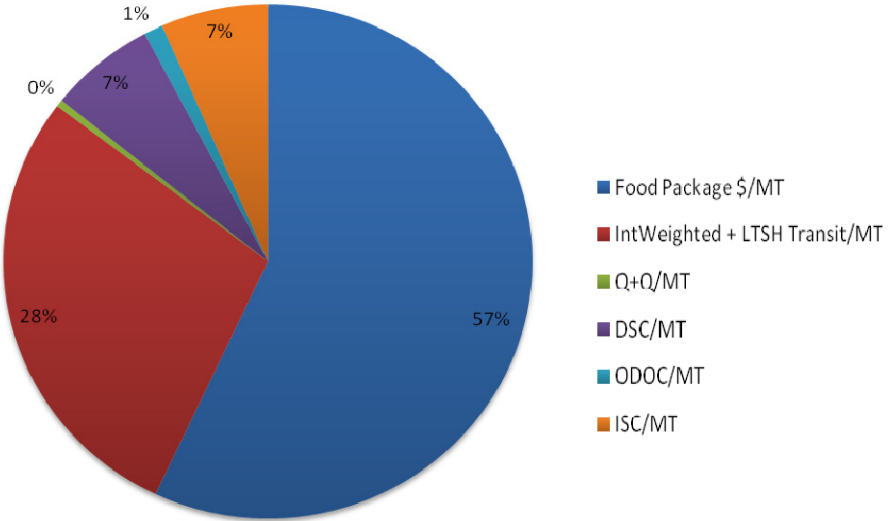


Figure 5. Global unit cost - PMTCT

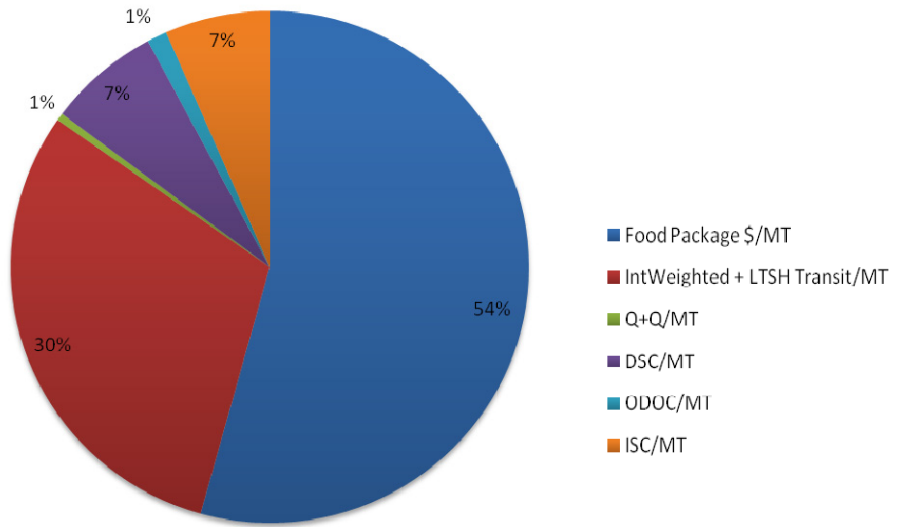


Figure 6. Global unit cost - TB

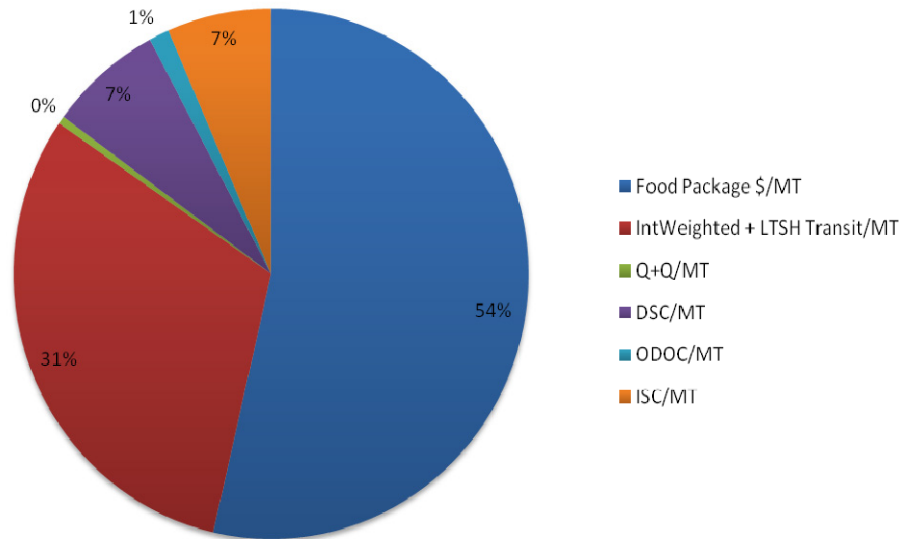
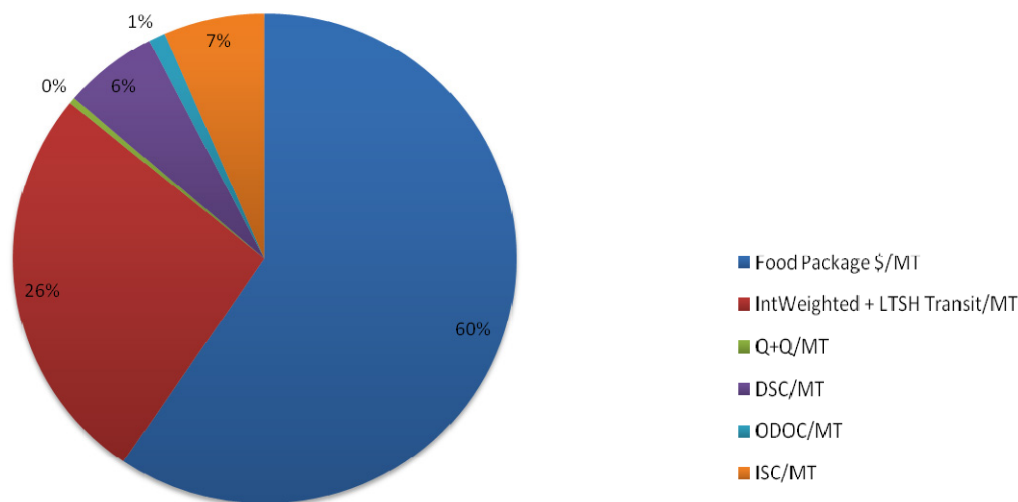


Figure 7. Global unit cost - OVC



Globally, nutritional support for an adult on ART and his or her family would cost approximately US\$ 0.70 per day, compared to US\$ 0.71 per day in 2008. The cost of support for TB patients is US\$ 0.70. Nutritional support for a child on ART would cost US\$ 0.64 per day, or US\$ 114.81 over the duration of six months of support. A new mother attempting to prevent transmission to her child would require nutritional support costing US\$ 0.83 per day, averaged over the 18 months of support. Supporting healthy pregnancies for women in food-insecure situations costs approximately US\$ 0.78 per day. Lastly, the cost of supporting OVC is US\$ 0.43 per day. Details of the global nutritional support costs can be seen in Table 10.

Table 10. Average cost of nutritional support, globally by client type

Global daily cost of nutritional support				
Client type	MT of specific food package/client/year	Total \$/MT	\$/client/year	\$/client/day
Adult ART	0.13	952.94	126.24	0.70
Child ART	0.11	1040.53	114.81	0.64
PMTCT	0.46	969.48	448.13	0.83
OVC	0.14	1118.16	154.98	0.43
TB	0.18	952.94	168.33	0.70

In sub-Saharan Africa, the cost of nutritional support is slightly lower when compared to the global average. As shown in Table 11, supporting an adult on ART or TB treatment in sub-Saharan Africa requires US\$ 0.02 less per day, compared to the global average. This change in daily cost of support is indicative of differences in the component costs of support.

Table 11. Average cost of nutritional support in sub-Saharan Africa, by client type

Daily cost of nutritional support in sub-Saharan Africa				
Client Type	MT of specific food package/client/year	Total \$/MT	\$/client/year	\$/client/day
Adult ART	0.13	930.53	123.28	0.68
Child ART	0.11	1016.17	112.12	0.62
PMTCT	0.46	944.92	436.78	0.81
OVC	0.14	1098.33	152.23	0.42
TB	0.18	930.53	164.37	0.68

Table 12 displays the cost of support in the Asia region. The cost of supporting adults on ART or TB treatment is lower than the global average by a difference of US\$ 0.09. The daily cost of food support for children on ART, PMTCT, and OVC (US\$ 0.57, US\$ 0.73, and US\$ 0.38 respectively), is also lower than the global average in each case. Overall, food support in Asia is less costly than in every other region included in the study, for every client type.

Table 12. Average cost of nutritional support in Asia region (OMB)

Daily cost of nutritional support in OMB region				
Client type	MT of specific food package/client/year	Total \$/MT	\$/client/year	\$/client/day
Adult ART	0.13	834.74	110.59	0.61
Child ART	0.11	922.48	101.79	0.57
PMTCT	0.46	847.58	391.79	0.73
OVC	0.14	988.14	136.96	0.38
TB	0.18	834.74	147.45	0.61

Table 13 displays the cost of support in the Eastern Europe and Central Asia region. Similar to Asia, the cost of support for each client type in Eastern Europe and Central Asia is less than the global average. Supporting HIV-positive adults or adults with TB is US\$ 0.69 in this region, compared to US\$ 0.70 globally. Food for a mother preventing mother-to-child transmission in Eastern Europe and Central Asia countries would cost US\$ 0.83, the same as the global cost. Similar costs are seen for the cost of support for HIV-positive children and OVC.

Table 13. Average cost of nutritional support in Eastern Europe and Central Asia region (OMC)

Daily cost of nutritional support in OMC region				
Client type	MT of specific food package/client/year	Total \$/MT	\$/client/year	\$/client/day
Adult ART	0.13	938.88	124.38	0.69
Child ART	0.11	1041.78	114.95	0.64
PMTCT	0.46	968.48	447.67	0.83
OVC	0.14	1174.54	162.79	0.45
TB	0.18	938.88	165.84	0.69

The daily cost of nutritional support for clients in the Western Africa region, a component of the sub-Saharan Africa average, is shown in Table 14 below. As seen in the previous

regions, the cost of support for adult ART, PMTCT, and TB in Western Africa is slightly higher than the average global cost of supporting clients. Support costs for children on ART and OVC are the same as the global average.

Table 14. Average cost of nutritional support in Western Africa region (OMD)

Daily cost of nutritional support in OMD region				
Client Type	MT of Specific Food Package/client/year	Total \$/MT	\$/client/year	\$/client/day
Adult ART	0.13	969.64	128.46	0.71
Child ART	0.11	1043.40	115.13	0.64
PMTCT	0.46	979.42	452.73	0.84
OVC	0.14	1127.78	156.31	0.43
TB	0.18	969.64	171.28	0.71

Table 15 shows the cost of nutritional support for clients in the Central, Eastern and Southern Africa region. Compared to both the global and sub-Saharan Africa averages, the cost of supporting adults on ART or TB treatment in Central, Eastern and Southern Africa is roughly equal: US\$ 0.70 globally, US\$ 0.68 in sub-Saharan Africa, and US\$ 0.68 in Central, Eastern and Southern Africa region. Support for a child on ART, PMTCT and OVC in this region is also about the same as the global and sub-Saharan Africa support costs.

Table 15. Average cost of nutritional support in Central, Eastern and Southern Africa region (OMJ)

Daily cost of nutritional support in OMJ region				
Client type	MT of specific food package/client/year	Total \$/MT	\$/client/year	\$/client/day
Adult ART	0.13	922.80	122.25	0.68
Child ART	0.11	1010.48	111.50	0.62
PMTCT	0.46	937.22	433.22	0.80
OVC	0.14	1088.92	150.92	0.42
TB	0.18	922.80	163.00	0.68

Support for clients in Latin America and the Caribbean is shown in Table 16. Per day, nutritional support for clients ranges from US\$ 0.43 for OVC to US\$ 0.78 for PMTCT. For all client types, the cost per day is below the global and sub-Saharan Africa averages.

Table 16. Average cost of nutritional support in Latin America and Caribbean region (OMP)

Daily cost of nutritional support in OMP region				
Client type	MT of specific food package/client/year	Total \$/MT	\$/client/year	\$/client/day
Adult ART	0.13	876.38	116.10	0.65
Child ART	0.11	978.13	107.93	0.60
PMTCT	0.46	909.88	420.58	0.78
OVC	0.14	1116.99	154.81	0.43
TB	0.18	876.38	154.80	0.65

In Table 17, the cost of food support for clients in Sudan is displayed. Sudan is its own WFP region. These costs are higher than all of the previous regions mentioned, making this the most expensive region for nutritional support. The cost of support for OVC, for instance, is US\$ 0.59 in Sudan, US\$ 0.16 higher than the US\$ 0.43 global cost.

Table 17. Average cost of nutritional support in Sudan (OMS)<sup>44</sup>

Daily cost of nutritional support in OMS region				
Client type	MT of specific food package/client/year	Total \$/MT	\$/client/year	\$/client/day
Adult ART	0.13	1302.28	172.53	0.96
Child ART	0.11	1385.31	152.85	0.85
PMTCT	0.46	1315.87	608.25	1.13
OVC	0.14	1525.36	211.42	0.59
TB	0.18	1302.28	230.03	0.96

While care was taken to make this model as representative and appropriate as possible, some limitations in the model exist. The model assumed that the costs incurred by WFP in the delivery of nutritional support are representative of the costs of other organizations and programmes providing food and nutritional support to HIV/AIDS and TB patients. It is important to bear in mind that WFP is the world's largest humanitarian organization and that in many countries it runs large-scale food operations. The resources with which the WFP operates may be different for smaller scale organizations and operations that don't have the global assets that WFP utilizes. The different or unique input costs of food support for other organizations may cause the total cost of nutritional support provided by these organizations to differ.

Additionally, since the data were collected from and analyzed primarily only low- and middle-income countries, the global estimates calculated may not reflect the true costs of nutritional programming in higher income nations. Also, for some regions, very few programmes were in place from which data could be extracted. This may reduce the accuracy with which the calculated regional averages reflect the true costs of nutritional support.

Similarly, some of the estimated costs may not be applicable to all regions, as the ration design is based of global commodity purchases. Some regions, such as Asia, may prefer rice as the cereal in food rations rather than the maize meal or CSB included in the model. This preference for commodities other than those in the costing model may change the food ration price, since the price of the commodity and transit costs may differ substantially.

Lastly, the model may not accurately represent the cost of child ART and OVC nutritional support for children of all ages. Because the average age of a child on ART and the average age of OVC were used to determine the daily nutritional requirements provided in the ration, a child younger than average may require less food, while an older child may require more than what was stated in the model. This could alter the cost of nutritional

<sup>44</sup> Similar information on select countries is provided in Appendix G.

support considerably when applied to a large programme. Ideally, the ration would be based on the age of each child being supported.

Despite the 2008 food and fuel crisis that caused increases in both commodity and transportation costs, as we look at the data for providing nutritional support we observe that, on average, the costs are more or less the same. The report highlights the fact that providing nutritional support around HIV and TB programmes is both necessary and affordable. At the same time, there is also a need to continue to monitor costs and further refine and validate cost estimates.

## APPENDIX A – COUNTRY PROJECT LIST (HIV/AIDS & TB)

Below is a list of each programme included in this study from which data were extrapolated. Each programme was operated during 2008 and submitted a standardized project report.

Table 18. Programmes included in the study

Region	Country	Project #	Programme	Project title
OMB	Afghanistan	10427.0	TB	Single Country PRRO - Post-Conflict Relief and Rehabilitation in Islamic Republic of Afghanistan
OMB	Cambodia	10305.1	HIV/TB	Single Country PRRO - Assisting People in Crisis
OMB	India	10107.0	HIV	Country Programme - Country Programme - India (2003-2008) (Act6:Suppl. HIV/AIDS)
OMB	Lao PDR	10566.0	HIV	Single Country PRRO - Assistance to Food-Insecure Households Affected by Multiple Livelihood Shocks
OMB	Myanmar	10066.3	HIV	Single Country PRRO - Assistance to Vulnerable Families in Myanmar
OMC	Georgia	10211.1	HIV/TB	Single Country PRRO - Assistance to Recovery and Capacity Building
OMC	Russian Federation	10128.2	HIV/TB	Single Country EMOP - Emergency Food Assistance to Vulnerable Groups in the North Caucasus
OMC	Tajikistan	10603.0	HIV/TB	Single Country PRRO - Transitional Relief and Recovery Support to Food-Insecure Households
OMD	Benin	10484.0	HIV	Development Project - Nutritional Support to Households Affected by HIV/AIDS
OMD	Burkina Faso	10399.0	TB	Country Programme - Country Programme - Burkina Faso (2006-2010) (Act2: Health)
OMD	Central African Republic	10189.2	HIV/TB	Single Country PRRO - Assistance to Populations Affected by Armed Conflicts in the Central African Republic
OMD	Chad	10478.0	HIV	Country Programme - Country Programme - Chad (2007-2010)
OMD	Côte d'Ivoire	10672.0	HIV	Single Country PRRO - Assistance to Populations Affected by the Côte d'Ivoire protracted crisis
OMD	Ghana	10673.0	HIV	Single Country PRRO - Assistance to Most Vulnerable Refugee Caseloads in Ghana in support of Government Strategy to Promote Repatriation, Resettlement and Local Integration through Achievement of Self-sufficiency
OMD	Guinea-Bissau	10148.2	HIV/TB	Single Country PRRO - Post-Conflict Relief and Rehabilitation in Guinea-Bissau
OMD	Guinea Conakry	10453.0	HIV	Country Programme - Country Programme - Guinea (2007-2011)
OMD	Guinea Conakry	10553.0	HIV	Single Country PRRO - Post-Conflict Transition in Forest Guinea Region
OMD	Liberia	10454.0	HIV/TB	Single Country PRRO - Food Assistance for Relief and Recovery in Post-Conflict Liberia

OMD	Mali	10452.0	HIV/TB	Single Country PRRO - Fight against malnutrition and strengthening of productive assets in the North of Mali
OMD	Mauritania	10605.0	HIV	Single Country PRRO - Support to Population Groups Vulnerable to Food Insecurity and Malnutrition and Strengthening of Response Mechanisms
OMD	Niger	10285.0	HIV/TB	Country Programme - Country Programme - Niger (2004-2007)
OMD	Sao Tome and Principe	10422.0	HIV	Development Project - Support to Basic Education and Health Care System for Vulnerable Groups
OMD	Sierra Leone	10554.0	HIV	Single Country PRRO - Food Assistance to Refugee and Returnee-Affected Areas of Sierra Leone
OMD	Sierra Leone	10584.0	HIV	Country Programme - Country Programme - Sierra Leone (2008-2010)
OMJ	Burundi	10528.0	HIV	Single Country PRRO- Support for the Stabilisation and Recovery of Burundi: Protecting and Creating Livelihoods while Improving the Nutritional Status of the Most Vulnerable
OMJ	Congo	10312.1	HIV/TB	Single Country PRRO- Assistance to Populations Affected by Conflict and Poverty
OMJ	Djibouti	10544.0	HIV/TB	Single Country PRRO – Food Assistance to Vulnerable Groups and Refugees
OMJ	Democratic Republic of the Congo	10608.0	HIV/TB	Single Country PPRO- Targeted Food Assistance for Relief and Recovery in Democratic Republic of the Congo
OMJ	Ethiopia	10665.0	HIV	Single Country PRRO- Responding to Humanitarian Crises and Enhancing Resilience to Food Insecurity
OMJ	Kenya	10264.0	HIV	Country Programme - Kenya (2004-2008)
OMJ	Lesotho	10599.0	HIV/TB	Single Country PRRO- Social Protection and Food Assistance for Vulnerable Groups in Lesotho
OMJ	Madagascar	10340.0	HIV/TB	Country Programme - Madagascar (2005-2009)
OMJ	Malawi	10586.0	HIV/TB	Single Country PRRO- Assistance to Food-Insecure People Suffering from the Effects of Natural Disasters and HIV and AIDS
OMJ	Mozambique	10446.0	HIV	Country Programme - Mozambique (2007-2011)
OMJ	Mozambique	10600.0	HIV	Single Country PRRO- Food support for protection of lives and livelihoods of the most vulnerable people in Mozambique
OMJ	Rwanda	10531.0	HIV	Single Country PRRO- Assistance to Refugees and Recovery Operations for the Most Vulnerable Households
OMJ	Somalia	10191.1	HIV/TB	Single Country PRRO- Food Aid for Relief and Protection of Livelihoods
OMJ	Swaziland	10602.0	HIV/TB	Single Country PRRO- Assistance to Food-Insecure People Affected by HIV and AIDS and Natural Disasters
OMJ	United Republic of Tanzania	10437.0	HIV/TB	Country Programme – United Republic of Tanzania (2007-2010)
OMJ	United Republic of Tanzania	10529.0	HIV/TB	Single Country PRRO- Assistance to Refugees in Camps and Vulnerable Households among the Host Population in North-Western Tanzania
OMJ	Uganda	10121.2	HIV/TB	Single Country PRRO- Targeted Food Assistance for Relief and Recovery of Refugees, Displaced Persons and Other Vulnerable Groups
OMJ	Uganda	10426.0	HIV/TB	Country Programme - Uganda (2006-2010)

OMJ	Zambia	10447.0	HIV/TB	Country Programme - Zambia (2007-2011)
OMJ	Zambia	10594.0	HIV/TB	Single Country PRRO- Assistance to Flood Victims in Zambia
OMJ	Zimbabwe	10595.0	HIV	Single Country PRRO- Protracted Relief for Vulnerable Groups in Zimbabwe
OMP	Haiti	10674.0	HIV/TB	Single County PRRO - Food Assistance for Relief and Livelihoods Protection of Vulnerable Populations Affected by Food Insecurity
OMP	Honduras	10538.0	HIV	Country Programme - Country Programme - Honduras (2008-2011)
OMS	Sudan	10693.0	HIV	Single Country EMOP - Food Assistance to Population Affected by Conflict

## APPENDIX B – QUALITY AND QUANTITY CHECK

Quality and quantity check (Q+Q) is displayed in the table below, divided by region.

Table 19. Q + Q, by region.

Region	Q + Q
OMB	7.55276843
OMC	5.01378286
OMD	9.29704074
OMJ	2.7680502
OMP	3.68496134
OMS	3.53937699

## APPENDIX C - TRANSIT COST BY COUNTRY

WFP tracked transport costs in very different ways; different databases were checked at either the headquarters level or at the local level. The Commodity Movement Processing and Analysis System (COMPAS) database at WFP contained the shipping manifest for commodity transfers that required external transportation via ocean liner. The consignment overview had the tonnages of all commodities that were subject to some form of external transport. The consignment overview for 2008 and 2009 (up to August) was used to extract the proportion of overseas and land transportation for commodity shipments in the 42 countries used in the model. The Landside Transport Shipping and Handling Matrix contained the international overland costs and the domestic overland costs, as well as the local logistical costs. It turned out that the rates per metric tonne of commodity shipped via external overseas methods were best derived from the COMPAS shipping manifest. The rates for international and local transit were combined into the LTSH rates. The internal domestic transportation rates and in-country logistics are also a component of LTSH rates.

The detailed procurement order used to extract commodity component costs was referenced to determine the average proportion of commodity for each country that comes from an external source (either overseas or overland). This was done in order to aggregate the cost per metric tonne of a standardized food ration delivered to a beneficiary into a single average transportation cost. The procurement order was also used to determine the proportion of commodities for each country that was sourced locally and therefore only subject to the LTSH rate. The percentage of total commodity handled in 2008 and 2009 was used as the percentage of international transit to charge against delivering a metric tonne of standardized food ration.

The model used the consignment overview to determine each procurement's external overseas and overland shipping costs, per country per metric tonne of food. The transport costs per tonne of food delivered per country were derived by using the amount of food delivered as the weighting item. Archived LTSH rates were taken from WINGS 2008 and 2009. LTSH rates were recorded by the amount of food delivered by the country. The tonnage of food delivered was the weighting factor for how much LTSH rate accounted for in country and regional averages. The international rate charged to the standardized food rations was determined by the international transit average rate per metric tonne of food delivered, multiplied by the average proportion of commodity received internationally in 2008 and 2009 by the country. This international proportionate rate plus LTSH is the logistic rate, which is expressed as \$USD/metric tonne of food package handled per country.<sup>45</sup>

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<sup>45</sup> Appendix D describes in detail the transit cost per country.

The tables below show the total regional transit cost, including ITSH (internal transport, storage and handling) weighted cost in \$USD per TSH (internal transport, storage and handling) of food package commodity, total MT, overseas MT, percent of transit overseas, overseas transit cost/MT, and LTSH/MT. ITSH weighted cost \$USD/MT of food package commodity is a freight rate, weighted by total overseas MT. Overseas transit cost per metric tonne is attributed to ITSH weighted cost \$USD/MT food package commodity multiplied by the percent of transit overseas. Total transit cost per metric tonne is attributed to overseas transit cost/MT and LTSH/MT. In addition, below the tables for each region, a chart shows the percentage of total metric tonnes transported internationally by country.

Table 20. Total regional and global transit costs

Transit cost per metric tonne (per region and global)							
	ITSH weighted cost \$USD/MT food package commodity	Total MT	Overseas MT	% of transit overseas	Overseas transit cost/MT	LTSH	TOTAL TRANSIT COST/MT
OMB	131.4475	81308.338	42049.542	51.7161499	67.97959	115.19	183.1696
OMC	101.409092	7393.165	4697.004	63.531708	64.42693	207.24	271.6669
OMD	143.298582	240082.153	145597.94	60.6450505	86.9035	212.86	299.76
OMJ	138.633988	1059339.2	499192.3	47.1229871	65.32848	220.13	285.46
OMP	118.360535	73125.032	63293.23	86.5548066	102.4467	131.98	234.4234
OMS	94.9922667	363779.806	111610.75	30.6808548	29.14444	508.33	537.4694
SSA	139.687284	1299421.4	644790.24	49.6213345	69.31469	216.562	285.8767
GLOBAL	131.764578	1825027.74	866440.77	47.4754849	62.55587	232.6222	295.1781

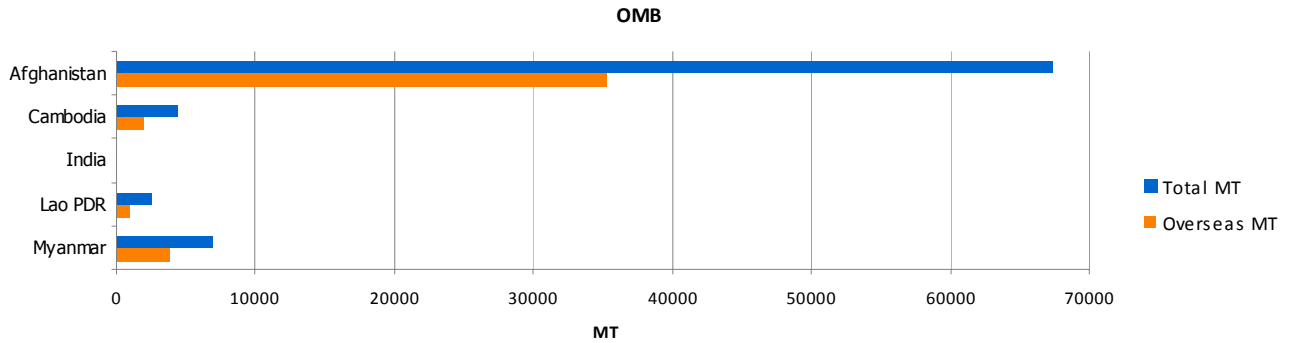
## Asia

Table 21. Transit costs, Asia region

Transit cost per metric tonne in OMB region							
Country	ITSH weighted cost \$USD/MT food package commodity	Total MT	Overseas MT	% of transit overseas	Overseas transit cost/MT	LTSH/MT	TOTAL TRANSIT COST/MT
Afghanistan	139.8422799	67372.98	35287.41	52.3762043	73.24408	101.29	174.5341
Cambodia	88.21879988	4493.939	1937.789	43.1200557	38.04	96.10	134.1383
India	0	0	0	0	0	134.10	134.1
Lao PDR	121.784815	2532.197	948.197	37.4456253	45.60309	139.09	184.6931
Myanmar	78.99859629	6909.227	3876.149	56.1010515	44.31904	105.39	149.709
<b>Total</b>	<b>131.4475005</b>	<b>81308.34</b>	<b>42049.54</b>	<b>51.7161499</b>	<b>67.97959</b>	<b>115.19</b>	<b>183.1696</b>

## Asia (cont'd)

Figure 8. Metric tonnes transported, Asia region

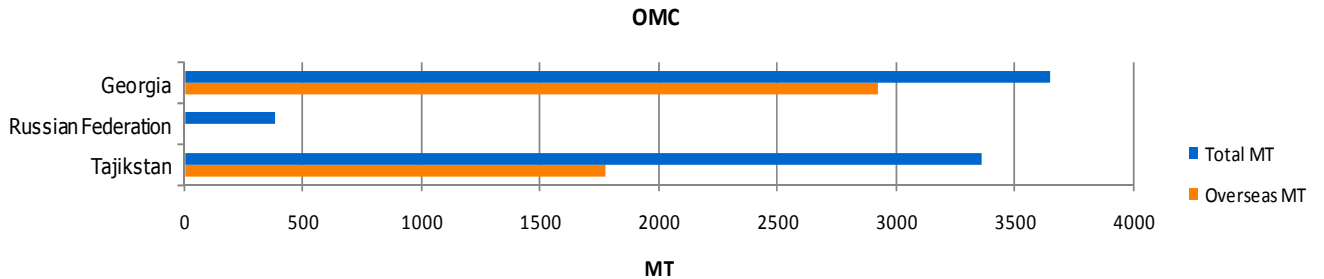


## Eastern Europe and Central Asia

Table 22. Transit costs, Eastern Europe and Central Asia region

Transit cost per metric tonne in OMC region							
Country	ITSH Weighted Cost \$USD/MT food package commodity	Total MT	Overseas MT	% of transit overseas	Overseas transit cost/MT	LTSH	TOTAL TRANSIT COST/MT
Georgia	86.93479368	3649.204	2922.344	80.0816836	69.61885	145.21	214.8238
Russian Federation	0	385	0	0	0	226.02	226.02
Tajikistan	125.2440129	3358.961	1774.66	52.8335994	66.17092	250.51	316.6797
<b>Total</b>	<b>101.4090924</b>	<b>7393.165</b>	<b>4697.004</b>	<b>63.531708</b>	<b>64.42693</b>	<b>207.24</b>	<b>271.6669</b>

Figure 9. Metric tonnes transported, Eastern Europe and Central Asia region



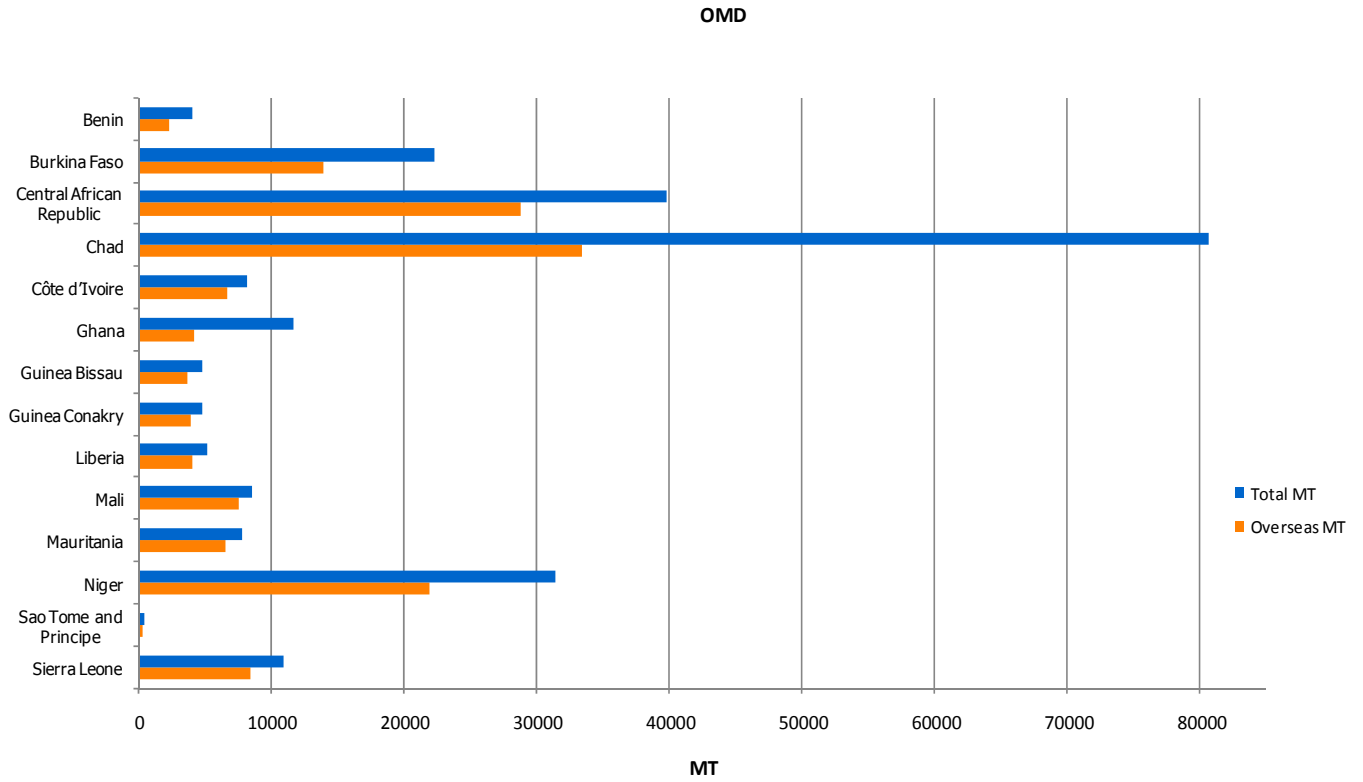
## Western Africa

Table 23. Transit costs, Western Africa region

Transit cost per metric tonne in OMD region							
Country	ITSH Weighted cost \$USD/MT food package commodity	Total MT	Overseas MT	% of transit overseas	Overseas transit cost/MT	LTSH	TOTAL TRANSIT COST/MT
Benin	67.69289628	4014.17	2294.277	57.1544553	38.68951	109.56	148.2445
Burkina Faso	87.16211737	22266.664	13934.321	62.5792934	54.54544	165.06	219.6088
Central African Republic	193.7153277	39754.496	28739.396	72.2921905	140.0411	487.20	627.2361
Chad	165.6166617	80607.878	33365.62	41.3925051	68.55289	645.93	714.4862
Côte d'Ivoire	162.0525307	8212.541	6690.309	81.4645431	132.0154	167.12	299.1304
Ghana	77.06329091	11686.376	4199.439	35.9344847	27.6923	92.75	120.4423
Guinea-Bissau	99.87544921	4802.031	3671.193	76.4508392	76.35562	129.02	205.3706
Guinea Conakry	119.2551019	4755.052	3952.699	83.1263044	99.13236	188.76	287.8949
Liberia	157.1048987	5099.594	4050.325	79.4244601	124.7797	255.52	380.3031
Mali	86.48741228	8479.533	7464.141	88.0253783	76.13087	177.82	253.9509
Mauritania	125.953261	7734.677	6561.11	84.8272009	106.8426	144.25	251.0876
Niger	144.5663377	31354.876	21920.088	69.9096625	101.0658	180.78	281.8473
Sierra Leone	95.58225143	10921.88	8462.286	77.4801225	74.05725	126.81	200.8697
Sao Tome and Principe	236.0233519	392.385	292.739	74.6050435	176.0853	109.42	285.5053
<b>Total</b>	<b>143.2985817</b>	<b>240082.15</b>	<b>145597.9</b>	<b>60.6450505</b>	<b>86.9035</b>	<b>212.85</b>	<b>299.76</b>

## Western Africa (cont'd)

Figure 10. Metric tonnes transported, Western Africa



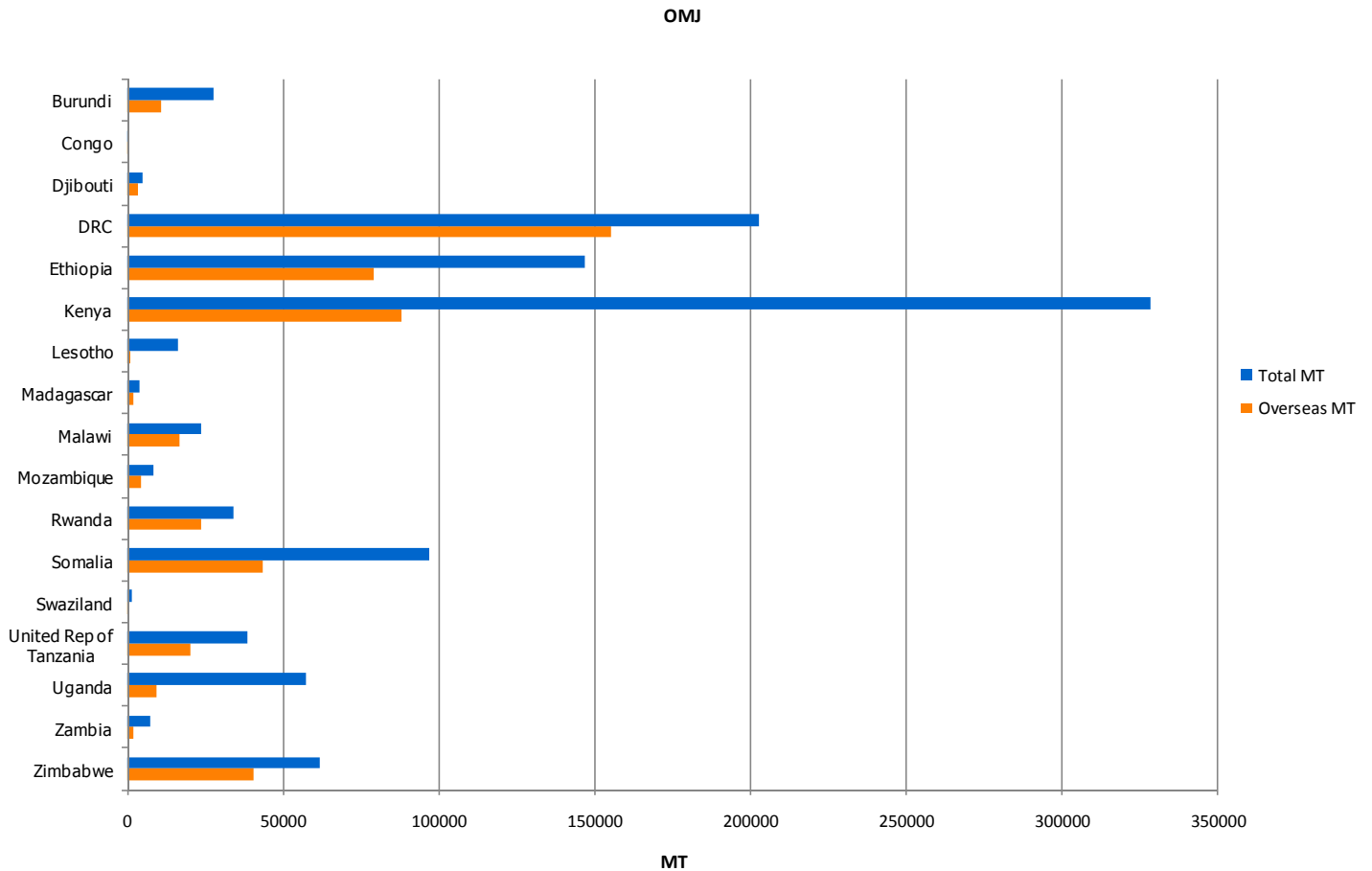
## Central, Eastern and Southern Africa

Table 24. Transit costs, Central, Eastern and Southern Africa region

Transit cost per metric tonne in OMJ region							
County	ITSH weighted cost \$USD/MT food package commodity	Total MT	Overseas MT	% of transit overseas	Overseas transit cost/MT	LTSH	TOTAL TRANSIT COST/MT
Congo	113.3387162	326.611	192.586	58.9649461	66.83011	415.46	482.2901
Burundi	113.4644833	27592.493	10961.118	39.7250006	45.07377	174.93	220.0049
Djibouti	67.14750339	4672.787	3350.446	71.7012353	48.14559	141.23	189.3706
DRC	142.3601264	203025.62	155253.65	76.4699826	108.8628	852.95	961.8103
Ethiopia	115.4624516	147012.24	79221.663	53.8877997	62.22017	161.46	223.6822
Kenya	112.748637	328666.59	88005.108	26.7764084	30.19004	108.09	138.2785
Lesotho	45.53998549	16127.705	941.479	5.83765018	2.658465	131.70	134.3585
Madagascar	95.59169827	3891.052	1582.158	40.6614458	38.86897	185.13	223.9965
Malawi	230.9244069	23657.046	16670.938	70.4692293	162.7306	167.91	330.6406
Mozambique	228.6785056	8079.4	4318.8	53.4544644	122.2389	170.07	292.3039
Rwanda	212.2930567	33780.208	23705.408	70.1754353	148.9776	153.12	302.0976
Somalia	86.83969735	96623.238	43278.274	44.7907511	38.89615	263.63	302.5262
Swaziland	57.19094277	1155.196	287.196	24.8612357	14.21838	82.97	97.18838
United Republic of Tanzania	84.87362298	38251.269	20147.331	52.6710133	44.7038	139.63	184.3375
Uganda	157.4247666	57297.888	9238.632	16.1238613	25.38295	150.56	175.9435
Zambia	88.9389738	7505.708	1713.269	22.8262144	20.3014	223.36	243.6614
Zimbabwe	232.8032532	61674.196	40324.236	65.3826699	152.213		152.213
<b>Total</b>	<b>138.633988</b>	<b>1059339.2</b>	<b>499192.3</b>	<b>47.1229871</b>	<b>65.32848</b>	<b>220.1369</b>	<b>285.4654</b>

## Central, Eastern and Southern Africa (cont'd)

Figure 11. Metric tonnes transported, Central, Eastern and Southern Africa region



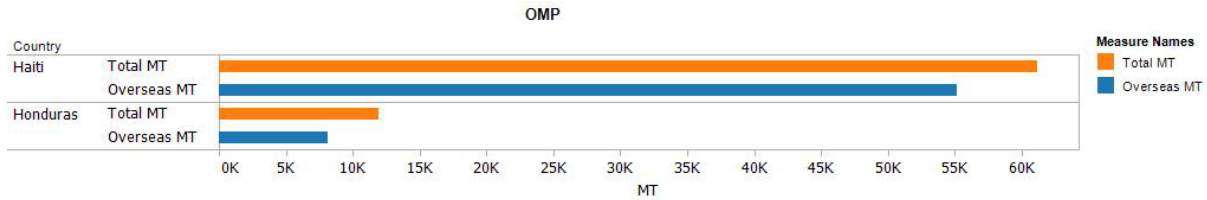
## Latin America and the Caribbean

Table 25. Transit costs, Latin America and Caribbean region

Transit cost per metric tonne in OMP region							
Country	ITSH weighted cost \$USD/MT food package commodity	Total MT	Overseas MT	% of transit overseas	Overseas transit cost/MT	LTSH	TOTAL TRANSIT COST/MT
Haiti	129.1178197	61202.13	55188.43	90.17403	116.4307	131.9767	248.4074
Honduras	45.11038646	11922.9	8104.798	67.97675	30.66457		30.66457
<b>Total</b>	<b>118.3605353</b>	<b>73125.03</b>	<b>63293.23</b>	<b>86.55481</b>	<b>102.4467</b>	<b>131.9767</b>	<b>234.4234</b>

## Latin America and the Caribbean (cont'd)

Figure 12. Metric tonnes transported, Latin America and Caribbean region

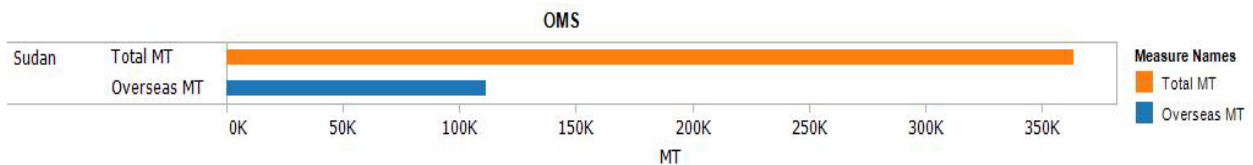


## Sudan

Table 26. Transit costs, Sudan region

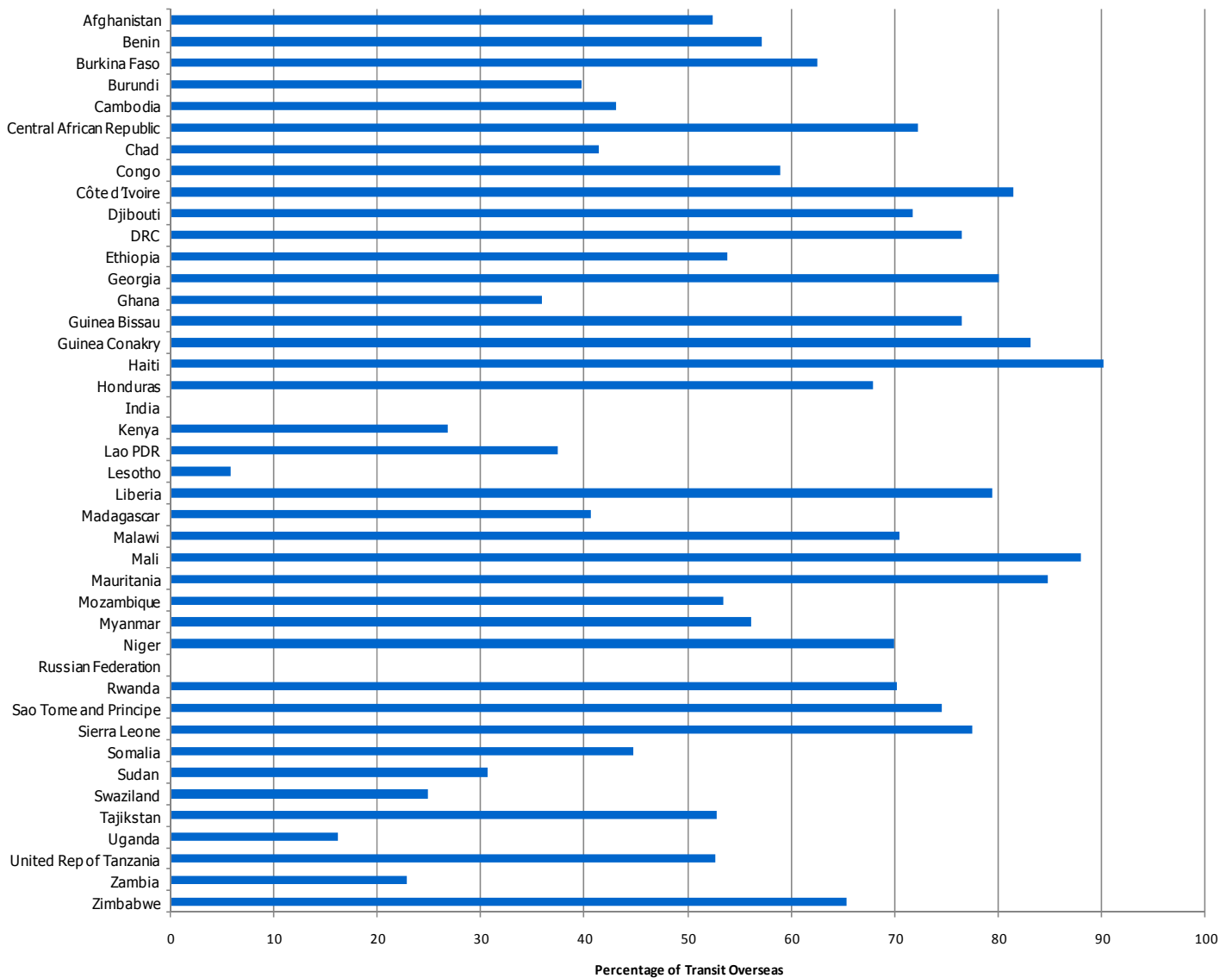
Transit cost per metric tonne in OMS region							
Country	ITSH weighted cost \$USD/MT food package commodity	Total MT	Overseas MT	% of transit overseas	Overseas transit cost/MT	LTSH	TOTAL TRANSIT COST/MT
Sudan	94.99226672	363779.8	111610.8	30.68085	29.14444	508.325	537.4694
<b>Total</b>	<b>94.99226672</b>	<b>363779.8</b>	<b>111610.8</b>	<b>30.68085</b>	<b>29.14444</b>	<b>508.325</b>	<b>537.4694</b>

Figure 13. Metric tonnes transported, Sudan region



In summary, the chart below describes the amount of commodity that was transported overseas, rather than purchased within the country. The amount ranged from less than 10% of commodities, such as in Lesotho, to more than 90%, such as in Haiti.

Figure 8. Percentage of commodity transported overseas



## APPENDIX D – DIRECT SUPPORT COSTS AND OTHER DIRECT OPERATING COSTS BY REGION

Regional direct support costs (DSC) and other direct operating Costs (ODOC) are displayed in the table below.

Table 27. Direct support costs and other direct operating costs, by region

Region	DSC /MT	Region	ODOC /MT
OMB	55.468497	OMB	15.531297
OMC	52.361571	OMC	14.60485
OMD	100.19675	OMD	23.845882
OMJ	46.200813	OMJ	12.40164
OMP	68.366467	OMP	11.398725
OMS	106.33232	OMS	2.4615362

## APPENDIX E – INDIRECT SUPPORT COST BY REGION

Indirect support cost (ISC) is displayed in the table below separated by both by region and model.

Table 28. Indirect support costs, by region and model

ISC Adult ART		ISC Child ART		ISC PMTCT	
Region	ISC/MT	Region	ISC/MT	Region	ISC/MT
OMB	54.6093693	OMB	60.3491661	OMB	55.4493218
OMC	61.4217325	OMC	68.1536992	OMC	63.3586466
OMD	63.4346584	OMD	68.2601050	OMD	64.0741126
OMJ	60.36978	OMJ	66.10634	OMJ	61.31336
OMP	57.3329794	OMP	63.9897642	OMP	59.5247995
OMS	85.1958586	OMS	90.6275932	OMS	86.0849627

ISC OVC		ISC TB	
Region	ISC/MT	Region	ISC/MT
OMB	64.6446542	OMB	54.6093693
OMC	76.8390853	OMC	61.4217325
OMD	73.7797511	OMD	63.4346584
OMJ	71.23805	OMJ	60.36978
OMP	73.0738282	OMP	57.3329794
OMS	99.7900844	OMS	85.1958586

## APPENDIX F – TOTAL \$/MT OF FOOD PACKAGE

The study estimates the cost of nutritional support for clients and their families, with the exception of OVC where only the client is supported. Estimated unit costs incorporate not only the cost of commodities, but transport, logistic and support costs. In the tables below, individual components and final cost are expressed as a \$USD rate per metric tonne of food delivered at the WFP regional level, global level, and for sub-Saharan Africa. Following each table, a pie chart displays the proportion that each component contributes to the total cost on the global scale and in sub-Saharan Africa.

Table 29. Adult ART costs, by region and globally

Adult ART cost per metric tonne							
	Food package \$/MT	Int weighted + LTSH transit/MT	Q+Q/MT	DSC/MT	ODOC/MT	ISC/MT	Total \$/MT of food package
<b>OMB</b>	518.4212863	183.16	7.55276843	55.468497	15.531297	54.60937	<b>834.7432175</b>
<b>OMC</b>	533.8061898	271.6669285	5.01378286	52.361571	14.60485	61.42173	<b>938.8750547</b>
<b>OMD</b>	473.1097062	299.7600279	9.29704074	100.19675	23.845882	63.43466	<b>969.644065</b>
<b>OMJ</b>	515.5895385	285.4654076	2.7680502	46.200813	12.40164	60.36978	<b>922.7952311</b>
<b>OMP</b>	501.1690113	234.423399	3.68496134	68.366467	11.398725	57.33298	<b>876.3755429</b>
<b>OMS</b>	567.281025	537.4694394	3.53937699	106.33232	2.4615362	85.19586	<b>1302.279554</b>
<b>Global</b>	510.9653974	295.1781023	4.59090196	67.84754	12.011773	62.34156	<b>952.9352754</b>
<b>SSA</b>	508.1184442	285.8766829	3.91970956	57.04364	14.699738	60.87607	<b>930.5342891</b>

Figure 14. Unit cost for adult ART, sub-Saharan Africa

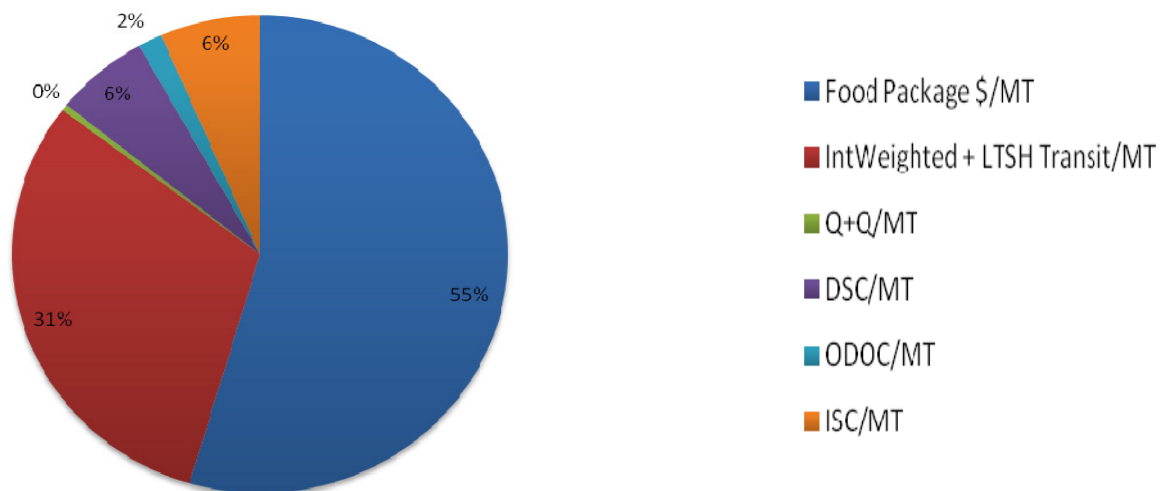


Table 30. Unit costs for TB, by region and globally

TB unit cost per metric tonne							
	Food package \$/MT	Int weighted + LTSH transit/MT	Q+Q/MT	DSC/MT	ODOC/MT	ISC/MT	Total \$/MT of food package
OMB	518.4212863	183.16	7.55276843	55.468497	15.531297	54.60937	<b>834.7432175</b>
OMC	533.8061898	271.6669285	5.01378286	52.361571	14.60485	61.42173	<b>938.8750547</b>
OMD	473.1097062	299.7600279	9.29704074	100.19675	23.845882	63.43466	<b>969.644065</b>
OMJ	515.5895385	1025.677605	2.7680502	46.200813	12.40164	112.1846	<b>1714.822283</b>
OMP	501.1690113	234.423399	3.68496134	68.366467	11.398725	57.33298	<b>876.3755429</b>
OMS	567.281025	537.4694394	3.53937699	106.33232	2.4615362	85.19586	<b>1302.279554</b>
<b>Global</b>	510.9653974	295.1781023	4.59090196	67.84754	12.011773	62.34156	<b>952.9352754</b>
<b>SSA</b>	508.1184442	285.8766829	3.91970956	57.04364	14.699738	60.87607	<b>930.5342891</b>

Figure 15. Unit cost for TB, sub-Saharan Africa

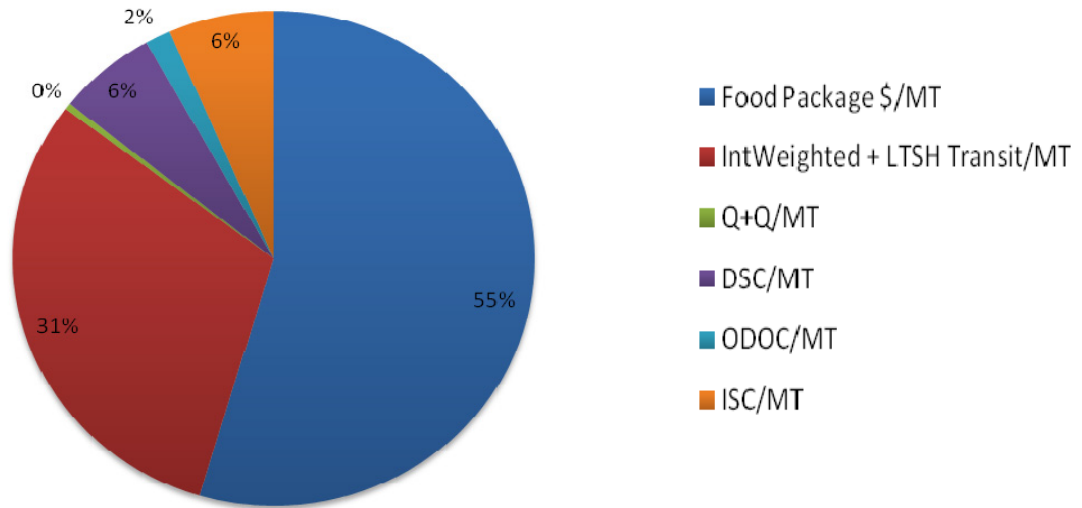


Table 31. Child ART costs, by region and globally

Child ART Unit cost per metric tonne							
	Food package \$/MT	Int weighted + LTSH transit/MT	Q+Q/MT	DSC/MT	ODOC/MT	ISC/MT	Total \$/MT of food package
OMB	600.4183832	183.16	7.55276843	55.468497	15.531297	60.34917	<b>922.4801111</b>
OMC	629.9771424	271.6669285	5.01378286	52.361571	14.60485	68.1537	<b>1041.777974</b>
OMD	542.0446573	299.7600279	9.29704074	100.19675	23.845882	68.26011	<b>1043.404463</b>
OMJ	597.5404362	1025.677605	2.7680502	46.200813	12.40164	117.9212	<b>1802.509743</b>
OMP	596.2659372	234.423399	3.68496134	68.366467	11.398725	63.98976	<b>978.1292536</b>
OMS	644.8772328	537.4694394	3.53937699	106.33232	2.4615362	90.62759	<b>1385.307497</b>
<b>Global</b>	592.82658	295.1781023	4.59090196	67.84754	12.011773	68.07184	<b>1040.526741</b>
<b>SSA</b>	588.1488844	285.8766829	3.91970956	57.04364	14.699738	66.47821	<b>1016.16686</b>

Figure 16. Unit cost for child ART, sub-Saharan Africa

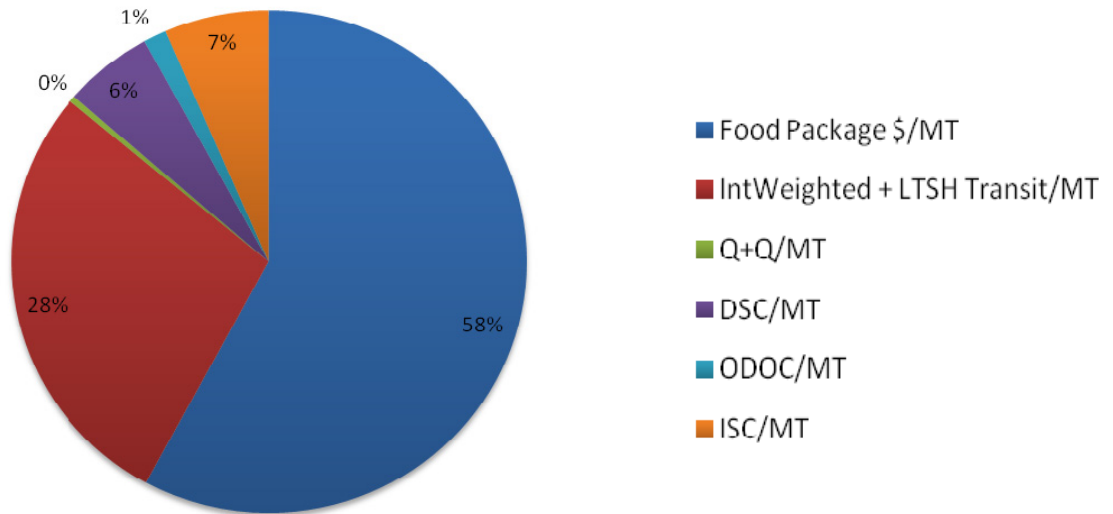


Table 32. PMTCT costs, by region and globally

PMTCT Cost per metric tonne							
	Food package \$/MT	Int weighted + LTSH transit/MT	Q+Q/MT	DSC/MT	ODOC/MT	ISC/MT	Total \$/MT of food package
OMB	530.4206072	183.16	7.55276843	55.468497	15.531297	55.44932	<b>847.5824909</b>
OMC	561.4763916	271.6669285	5.01378286	52.361571	14.60485	63.35865	<b>968.4821707</b>
OMD	482.244766	299.7600279	9.29704074	100.19675	23.845882	64.07411	<b>979.418579</b>
OMJ	529.069268	1025.677605	2.7680502	46.200813	12.40164	113.1282	<b>1729.245593</b>
OMP	532.4807267	234.423399	3.68496134	68.366467	11.398725	59.5248	<b>909.8790783</b>
OMS	579.9825119	537.4694394	3.53937699	106.33232	2.4615362	86.08496	<b>1315.870145</b>
<b>Global</b>	526.4272023	295.1781023	4.59090196	67.84754	12.011773	63.42389	<b>969.4794066</b>
<b>SSA</b>	521.5622322	285.8766829	3.91970956	57.04364	14.699738	61.81714	<b>944.9191423</b>

Figure 17. Unit cost for PMTCT, sub-Saharan Africa

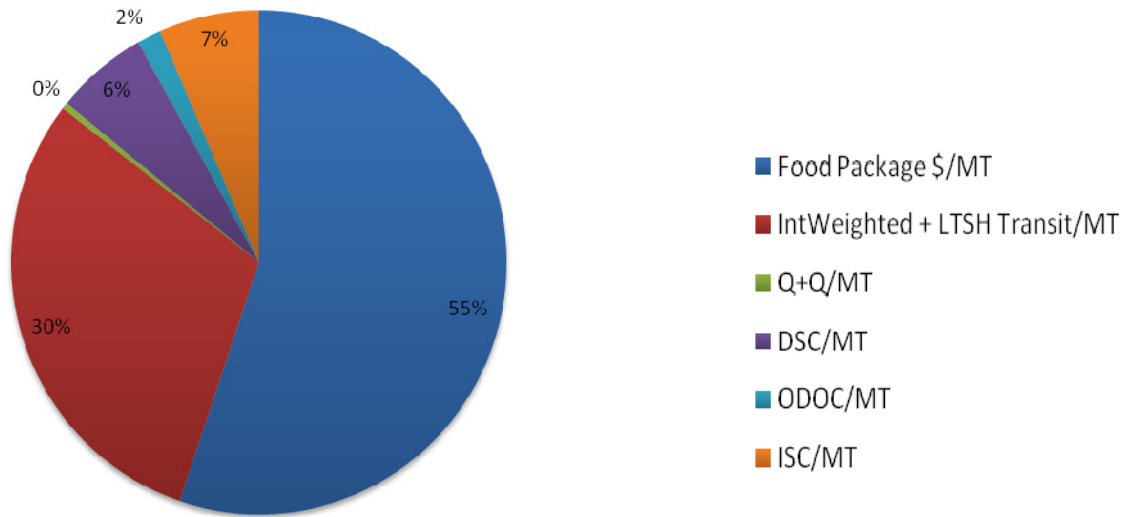
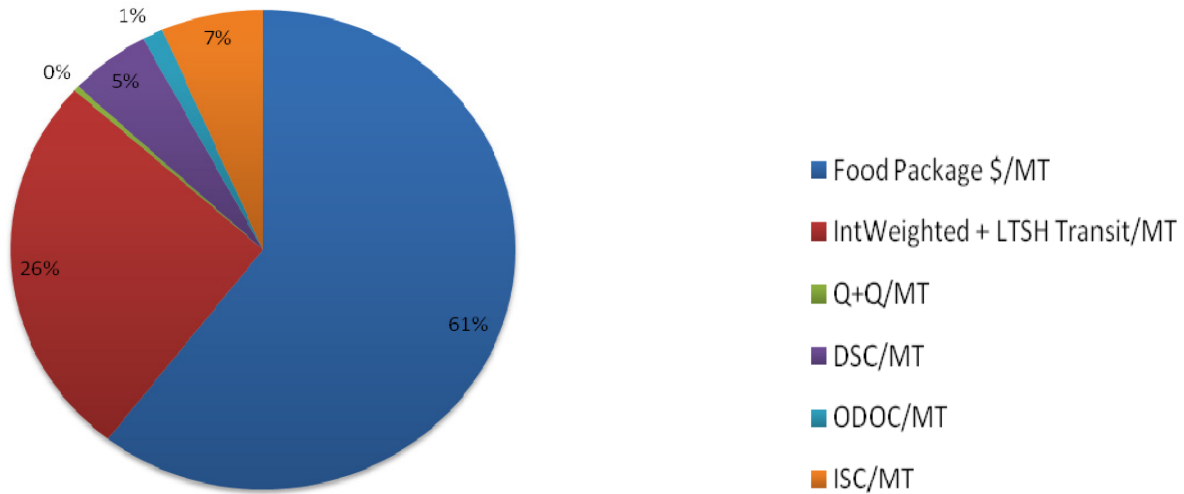


Table 33. OVC costs, by region and globally

OVC cost per metric tonne							
	Food package \$/MT	Int weighted + LTSH transit/MT	Q+Q/MT	DSC/MT	ODOC/MT	ISC/MT	Total \$/MT of food package
<b>OMB</b>	661.7824994	183.16	7.55276843	55.468497	15.531297	64.64465	<b>988.1397155</b>
<b>OMC</b>	754.0540871	271.6669285	5.01378286	52.361571	14.60485	76.83909	<b>1174.540305</b>
<b>OMD</b>	620.8967451	299.7600279	9.29704074	100.19675	23.845882	73.77975	<b>1127.776197</b>
<b>OMJ</b>	670.8504568	1025.677605	2.7680502	46.200813	12.40164	123.0529	<b>1880.951465</b>
<b>OMP</b>	726.0382794	234.423399	3.68496134	68.366467	11.398725	73.07383	<b>1116.98566</b>
<b>OMS</b>	775.7699642	537.4694394	3.53937699	106.33232	2.4615362	99.79008	<b>1525.362719</b>
<b>Global</b>	665.3789835	295.1781023	4.59090196	67.84754	12.011773	73.15051	<b>1118.157813</b>
<b>SSA</b>	664.935571	285.8766829	3.91970956	57.04364	14.699738	71.85327	<b>1098.328615</b>

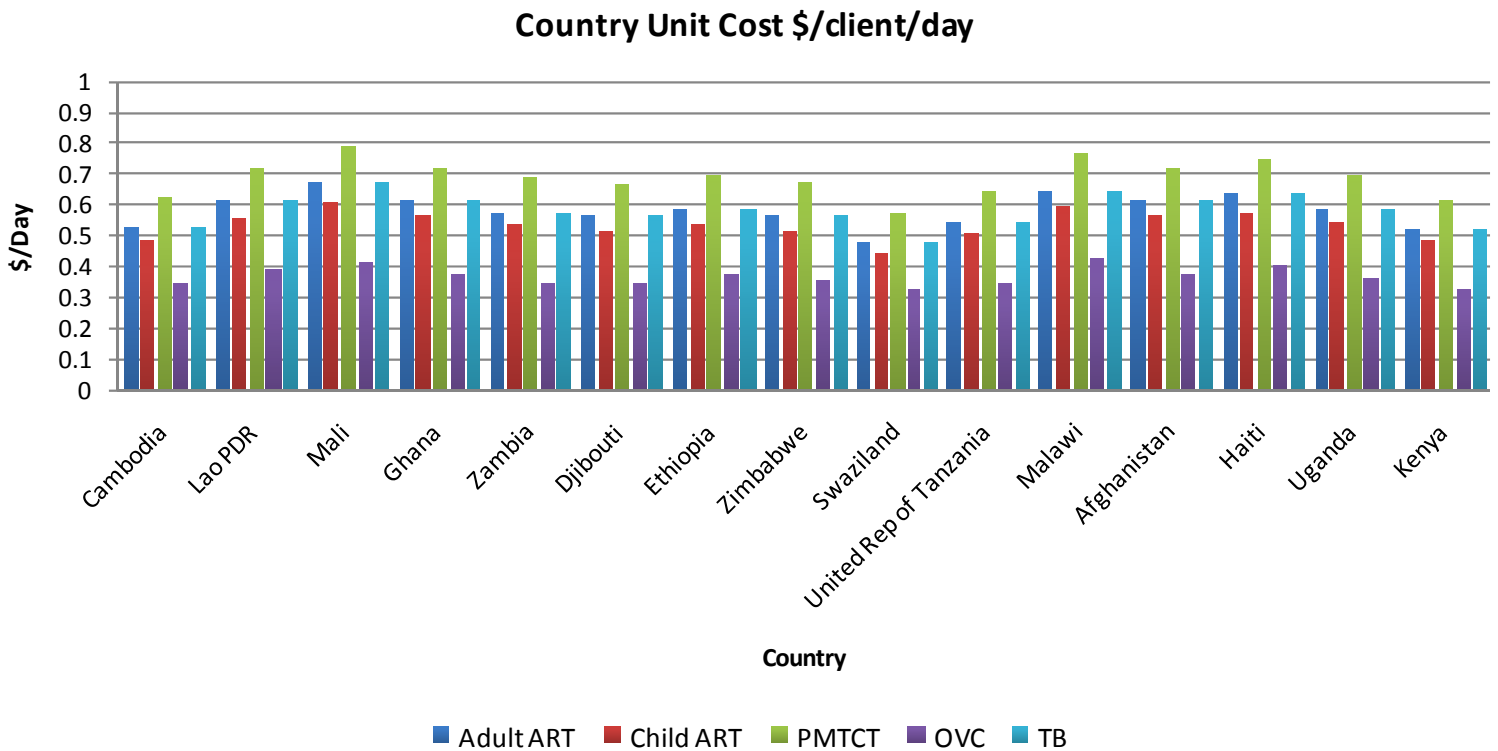
Figure 18. Unit cost for OVC, sub-Saharan Africa



## APPENDIX G – SELECT COUNTRY COSTS

Fifteen countries were selected to provide samples of different costs in each country: Kenya, Uganda, Haiti, Afghanistan, Malawi, United Republic of Tanzania, Swaziland, Zimbabwe, Ethiopia, Djibouti, Zambia, Ghana, Mali, Lao People’s Democratic Republic, and Cambodia. Each commodity was weighted by total MT procured in 2008 and 2009. However, some countries did not procure certain commodities in either 2008, 2009 or both (often maize meal or beans). These data have been replaced with regional weighted costs.

Figure 19. Costs in 15 selected countries



## Kenya

Table 33. Cost by commodity and client type (ART, PMTCT, OVC and TB)

2008 & 2009	Total MT procured	Weighted cost \$USD/MT	% Local purchase	% International
CSB	37955.1	547.56	17.32	82.68
MML	76273.9	392.72	2.61	97.39
BEAN	2183	651.31	100.00	0.00
OIL	17445.914	1362.44	0.25	99.75
SUGAR	184	498.50	0.00	100.00

	Total MT procured	Weighted cost \$USD/MT	% Local purchase	% International
CSB2008	27303.1	570.50	24.86	75.14
CSB2009	10652	488.77	9.79	90.21
MML2008	55327.9	413.00	5.21	94.79
MML2009	20946	339.14	0.00	100.00
BEAN2008	1097	662.50	100.00	0.00
BEAN2009	1086	640.00	100.00	0.00
OIL2008	9319.5	1604.10	0.00	100.00
OIL2009	8126.414	1085.31	0.49	99.51
SUGAR2008	92	542.00	0.00	100.00
SUGAR2009	92	455.00	0.00	100.00

	Food package \$/MT	Int weighted + LTSH transit/MT	Q+Q/MT	DSC/MT	ODOC/MT	ISC/MT	Total \$/MT of food package
<b>Adult ART</b>	508.6535033	138.2785355	2.19547256	16.775877	2.6665247	46.79989	<b>715.3698068</b>
<b>Child ART</b>	587.4910967	138.2785355	2.19547256	16.775877	2.6665247	52.31853	<b>799.7260318</b>
<b>PMTCT</b>	518.8978309	138.2785355	2.19547256	16.775877	2.6665247	47.517	<b>726.3312373</b>
<b>OVC</b>	647.713388	138.2785355	2.19547256	16.775877	2.6665247	56.53409	<b>864.1638834</b>
<b>TB</b>	508.6535033	138.2785355	2.19547256	16.775877	2.6665247	46.79989	<b>715.3698068</b>

	MT of specific food package/client/year	Total \$/MT OMB	\$/client/year	\$/client/day
Adult ART	0.13	715.37	94.77	<b>0.53</b>
Child ART	0.11	799.73	88.24	<b>0.49</b>
PMTCT	0.46	726.33	335.74	<b>0.62</b>
OVC	0.14	864.16	119.77	<b>0.33</b>
TB	0.18	715.37	126.36	<b>0.53</b>

## Uganda

Table 34. Cost by commodity and client type (ART, PMTCT, OVC and TB)

2008 & 2009	Total MT procured	Weighted cost \$USD/MT	% Local purchase	% International
CSB	16461.1	581.88	41.46	58.54
MML	7984	428.19	34.42	65.58
BEAN	23433.5	653.82	83.66	16.34
OIL	4835	1152.98	0.00	100.00
SUGAR	419.1	520.51	0.00	100.00

	Total MT procured	Weighted cost \$USD/MT	% Local purchase	% International
CSB2008	5957	583.00	41.04	58.96
CSB2009	10504.1	581.25	41.87	58.13
MML2008	6151	438.70	61.58	38.42
MML2009	1833	392.94	7.26	92.74
BEAN2008	17899.5	700.70	71.85	28.15
BEAN2009	5534	502.21	95.46	4.54
OIL2008	3013.3	1290.30	0.00	100.00
OIL2009	1821.7	925.84	0.00	100.00
SUGAR2008	393	522.20	0.00	100.00
SUGAR2009	26.1	495.00	0.00	100.00

	Food package \$/MT	Int weighted + LTSH transit/MT	Q+Q/MT	DSC/MT	ODOC/MT	ISC/MT	Total \$/MT of food package
<b>Adult ART</b>	533.0837131	175.9435393	3.31842548	37.732921	4.9656753	52.8531	<b>807.8973735</b>
<b>Child ART</b>	613.6799062	175.9435393	3.31842548	37.732921	4.9656753	58.49483	<b>894.1353001</b>
<b>PMTCT</b>	541.4780115	175.9435393	3.31842548	37.732921	4.9656753	53.4407	<b>816.8792727</b>
<b>OVC</b>	667.4401524	175.9435393	3.31842548	37.732921	4.9656753	62.25805	<b>951.6587636</b>
<b>TB</b>	533.0837131	175.9435393	3.31842548	37.732921	4.9656753	52.8531	<b>807.8973735</b>

	MT of Specific food package/client/year	Total \$/MT OMB	\$/client/year	\$/client/day
Adult ART	0.13	807.90	107.03	<b>0.59</b>
Child ART	0.11	894.14	98.66	<b>0.55</b>
PMTCT	0.46	816.88	377.59	<b>0.70</b>
OVC	0.14	951.66	131.90	<b>0.37</b>
TB	0.18	807.90	142.71	<b>0.59</b>

## Haiti

Table 35. Cost by commodity and client type (ART, PMTCT, OVC and TB)

2008 & 2009	Total MT procured	Weighted cost \$USD/MT	% Local purchase	% International
CSB	26570	460.19	0.00	100.00
MML	4818	380.05	0.00	100.00
BEAN	11569.5	819.94	0.00	100.00
OIL	10264.3	1266.39	0.00	100.00
SUGAR	644	457.54	0.00	100.00

	Total MT procured	Weighted cost \$USD/MT	% Local purchase	% International
CSB2008	12781	496.10	0.00	100.00
CSB2009	13789	426.91	0.00	100.00
MML2008	2265	450.00	0.00	100.00
MML2009	2553	318.00	0.00	100.00
BEAN2008	6741.5	850.40	0.00	100.00
BEAN2009	4828	777.42	0.00	100.00
OIL2008	5402.7	1443.80	0.00	100.00
OIL2009	4861.6	1069.24	0.00	100.00
SUGAR2008	69	437.00	0.00	100.00
SUGAR2009	575	460.00	0.00	100.00

	Food package \$/MT	Int weighted + LTSH transit/MT	Q+Q/MT	DSC/MT	ODOC/MT	ISC/MT	Total \$/MT of food package
Adult ART	473.9069913	248.4074109	3.20485249	70.039076	11.514213	56.49508	<b>863.567622</b>
Child ART	554.1043049	248.4074109	3.20485249	70.039076	11.514213	62.10889	<b>949.3787476</b>
PMTCT	494.5863517	248.4074109	3.20485249	70.039076	11.514213	57.94263	<b>885.6945376</b>
OVC	663.0015145	248.4074109	3.20485249	70.039076	11.514213	69.73169	<b>1065.898762</b>
TB	473.9069913	248.4074109	3.20485249	70.039076	11.514213	56.49508	<b>863.567622</b>

	MT of specific food package/client/year	Total \$/MT OMB	\$/client/year	\$/client/day
Adult ART	0.13	863.57	114.41	<b>0.64</b>
Child ART	0.11	949.38	104.75	<b>0.58</b>
PMTCT	0.46	885.69	409.40	<b>0.76</b>
OVC	0.14	1065.90	147.73	<b>0.41</b>
TB	0.18	863.57	152.54	<b>0.64</b>

## Afghanistan

Numbers in italics are regional data substitutes due to lack of country data.

Table 36. Cost by commodity and client type (ART, PMTCT, OVC and TB)

2008 & 2009	Total MT procured	Weighted cost \$USD/MT	% Local purchase	% International
CSB	7600	625.00	0.00	50.00
MML	0	400.28	0.00	0.00
BEAN	0	699.91	0.00	0.00
OIL	37168.4	1248.35	0.00	100.00
SUGAR	0	483.80	0.00	0.00

	Total MT procured	Weighted cost \$USD/MT	% Local purchase	% International
CSB2008	7600	625.00	0.00	100.00
CSB2009	0	0	0	0
MML2008	0	0	0	0
MML2009	0	0	0	0
BEAN2008	0	0	0	0
BEAN2009	0	0	0	0
OIL2008	22087.5	1455.10	0.00	100.00
OIL2009	15080.9	945.55	0.00	100.00
SUGAR2008	0	0	0	0
SUGAR2009	0	0	0	0

	Food package \$/MT	Int weighted + LTSH transit/MT	Q+Q/MT	DSC/MT	ODOC/MT	ISC/MT	Total \$/MT of food package
Adult ART	544.4009603	174.5340781	1.35615558	57.272905	11.319163	55.22183	<b>844.1050908</b>
Child ART	631.7244989	174.5340781	1.35615558	57.272905	11.319163	61.33448	<b>937.5412771</b>
PMTCT	554.9662073	174.5340781	1.35615558	57.272905	11.319163	55.9614	<b>855.4099051</b>
OVC	668.5027796	174.5340781	1.35615558	57.272905	11.319163	63.90896	<b>976.8940374</b>
TB	544.4009603	174.5340781	1.35615558	57.272905	11.319163	55.22183	<b>844.1050908</b>

	MT of Specific food package/client/year	Total \$/MT OMB	\$/client/year	\$/client/day
Adult ART	0.13	844.11	111.83	<b>0.62</b>
Child ART	0.11	937.54	103.45	<b>0.57</b>
PMTCT	0.46	855.41	395.40	<b>0.73</b>
OVC	0.14	976.89	135.40	<b>0.38</b>
TB	0.18	844.11	149.10	<b>0.62</b>

## Malawi

Numbers in italics are regional data substitutes due to lack of country data.

Table 37. Cost by commodity and client type (ART, PMTCT, OVC and TB)

2008 & 2009	Total MT procured	Weighted cost \$USD/MT	% Local purchase	% International
CSB	16974	553.01	59.66	40.34
MML	1612	461.40	100.00	0.00
BEAN	0	720.19	0.00	0.00
OIL	3325.6	930.48	4.16	95.84
SUGAR	113	465.35	100.00	0.00

	Total MT procured	Weighted cost \$USD/MT	% Local purchase	% International
CSB2008	14626	559.80	19.32	80.68
CSB2009	2348	510.70	100.00	0.00
MML2008	1573	465.00	100.00	0.00
MML2009	39	316.40	100.00	0.00
BEAN2008	0	0.00	0.00	0.00
BEAN2009	0	0.00	0.00	0.00
OIL2008	1047.2	1374.70	8.32	91.68
OIL2009	2278.4	726.30	0.00	100.00
SUGAR2008	80	449.70	100.00	0.00
SUGAR2009	33	503.30	100.00	0.00

	Food package \$/MT	Int weighted + LTSH transit/MT	Q+Q/MT	DSC/MT	ODOC/MT	ISC/MT	Total \$/MT of food package
<b>Adult ART</b>	533.6258476	330.6406499	4.896448	30.602537	21.36399	64.47906	<b>985.6085357</b>
<b>Child ART</b>	612.892529	330.6406499	4.896448	30.602537	21.36399	70.02773	<b>1070.423885</b>
<b>PMTCT</b>	544.7460709	330.6406499	4.896448	30.602537	21.36399	65.25748	<b>997.5071748</b>
<b>OVC</b>	690.9256386	330.6406499	4.896448	30.602537	21.36399	75.49005	<b>1153.919312</b>
<b>TB</b>	533.6258476	330.6406499	4.896448	30.602537	21.36399	64.47906	<b>985.6085357</b>

	MT of specific food package/client/year	Total \$/MT OMB	\$/client/year	\$/client/day
Adult ART	0.13	876.38	116.10	<b>0.65</b>
Child ART	0.11	978.13	107.93	<b>0.60</b>
PMTCT	0.46	909.88	420.58	<b>0.78</b>
OVC	0.14	1116.99	154.81	<b>0.43</b>
TB	0.18	876.38	154.80	<b>0.65</b>

## United Republic of Tanzania

Numbers in italics are regional data substitutes due to lack of country data.

Table 38. Cost by commodity and client type (ART, PMTCT, OVC and TB)

2008 & 2009	Total MT procured	Weighted cost \$USD/MT	% Local purchase	% International
CSB	5793.7	472.99	0.00	100.00
MML	6390	368.72	0.00	100.00
BEAN	3378	644.00	34.50	65.50
OIL	1203.1	1254.55	0.00	100.00
SUGAR	0	490.96	0.00	0.00

	Total MT procured	Weighted cost \$USD/MT	% Local purchase	% International
CSB2008	3918	506.50	0.00	100.00
CSB2009	1875.7	403.00	0.00	100.00
MML2008	2380	375.00	0.00	100.00
MML2009	4010	365.00	0.00	100.00
BEAN2008	1946	651.00	50.15	49.85
BEAN2009	1432	634.49	18.85	81.15
OIL2008	783	1340.00	0.00	100.00
OIL2009	420.1	1095.30	0.00	100.00
SUGAR2008	0	0	0	0
SUGAR2009	0	0	0	0

	Food package \$/MT	Int weighted + LTSH transit/MT	Q+Q/MT	DSC/MT	ODOC/MT	ISC/MT	Total \$/MT of food package
Adult ART	461.5734318	184.337501	2.15063044	47.252902	3.9407091	48.94786	<b>748.2030365</b>
Child ART	534.2024312	184.337501	2.15063044	47.252902	3.9407091	54.03189	<b>825.9160659</b>
PMTCT	473.6679733	184.337501	2.15063044	47.252902	3.9407091	49.79448	<b>761.1441958</b>
OVC	610.2353138	184.337501	2.15063044	47.252902	3.9407091	59.35419	<b>907.2712502</b>
TB	461.5734318	184.337501	2.15063044	47.252902	3.9407091	48.94786	<b>748.2030365</b>

	MT of specific food package/client/year	Total \$/MT OMB	\$/client/year	\$/client/day
Adult ART	0.13	748.20	99.12	<b>0.55</b>
Child ART	0.11	825.92	91.13	<b>0.51</b>
PMTCT	0.46	761.14	351.83	<b>0.65</b>
OVC	0.14	907.27	125.75	<b>0.35</b>
TB	0.18	748.20	132.16	<b>0.55</b>

## Swaziland

Numbers in italics are regional data substitutes due to lack of country data.

Table 39. Cost by commodity and client type (ART, PMTCT, OVC and TB)

2008 & 2009	Total MT procured	Weighted cost \$USD/MT	% Local purchase	% International
CSB	868	371.75	0.00	100.00
MML	0	<i>400.03</i>	0.00	0.00
BEAN	0	<i>720.19</i>	0.00	0.00
OIL	287.1	1221.00	0.00	50.00
SUGAR	0	<i>490.96</i>	0.00	0.00

	Total MT procured	Weighted cost \$USD/MT	% Local purchase	% International
CSB2008	98	435.00	0.00	100.00
CSB2009	770	363.70	0.00	100.00
MML2008	0	0	0	0
MML2009	0	0	0	0
BEAN2008	0	0	0	0
BEAN2009	0	0	0	0
OIL2008	287.1	1221.00	0.00	100.00
OIL2009	0	0	0	0
SUGAR2008	0	0	0	0
SUGAR2009	0	0	0	0

	Food package \$/MT	Int weighted + LTSH transit/MT	Q+Q/MT	DSC/MT	ODOC/MT	ISC/MT	Total \$/MT of food package
<b>Adult ART</b>	437.7149597	705.9314614	17.0656131	55.410157	9.354244	43.17133	<b>659.9046831</b>
<b>Child ART</b>	504.7430268	705.9314614	4.59090196	55.410157	9.354244	89.60209	<b>1369.631876</b>
<b>PMTCT</b>	454.8821005	705.9314614	4.59090196	55.410157	9.354244	86.11182	<b>1316.280685</b>
<b>OVC</b>	626.3368107	705.9314614	4.59090196	55.410157	9.354244	98.11365	<b>1499.737225</b>
<b>TB</b>	437.7149597	705.9314614	4.59090196	55.410157	9.354244	84.91012	<b>1297.911845</b>

	MT of specific food package/client/year	Total \$/MT OMB	\$/client/year	\$/client/day
Adult ART	0.13	654.78	86.75	<b>0.48</b>
Child ART	0.11	726.49	80.16	<b>0.45</b>
PMTCT	0.46	673.15	311.16	<b>0.58</b>
OVC	0.14	856.61	118.73	<b>0.33</b>
TB	0.18	654.78	115.66	<b>0.48</b>

## Zimbabwe

Numbers in italics are regional data substitutes due to lack of country data.

Table 40. Cost by commodity and client type (ART, PMTCT, OVC and TB)

2008 & 2009	Total MT procured	Weighted cost \$USD/MT	% Local purchase	% International
CSB	22512	537.01	41.12	58.88
MML	0	<i>400.03</i>	0.00	0.00
BEAN	18425	733.41	0.00	100.00
OIL	16768	1487.27	0.00	100.00
SUGAR	0	<i>490.96</i>	0.00	0.00

	Total MT procured	Weighted cost \$USD/MT	% Local purchase	% International
CSB2008	9080	616.10	58.27	41.73
CSB2009	13432	483.55	23.97	76.03
MML2008	0	0	0	0
MML2009	0	0	0	0
BEAN2008	18300	735.00	0.00	100.00
BEAN2009	125	500.00	0.00	100.00
OIL2008	16710	1468.30	0.00	100.00
OIL2009	58	6953.00	0.00	100.00
SUGAR2008	0	0	0	0
SUGAR2009	0	0	0	0

	Food package \$/MT	Int weighted + LTSH transit/MT	Q+Q/MT	DSC/MT	ODOC/MT	ISC/MT	Total \$/MT of food package
<b>Adult ART</b>	517.4891092	152.2129826	4.42650305	31.274089	20.284298	50.79809	<b>776.4850716</b>
<b>Child ART</b>	588.4423601	152.2129826	4.42650305	31.274089	20.284298	55.76482	<b>852.40505</b>
<b>PMTCT</b>	531.9138	152.2129826	4.42650305	31.274089	20.284298	51.80782	<b>791.9194906</b>
<b>OVC</b>	665.4028454	152.2129826	4.42650305	31.274089	20.284298	61.15205	<b>934.7527692</b>
<b>TB</b>	517.4891092	152.2129826	4.42650305	31.274089	20.284298	50.79809	<b>776.4850716</b>

	MT of specific food package/client/year	Total \$/MT OMB	\$/client/year	\$/client/day
Adult ART	0.13	776.49	102.87	<b>0.57</b>
Child ART	0.11	852.41	94.05	<b>0.52</b>
PMTCT	0.46	791.92	366.06	<b>0.68</b>
OVC	0.14	934.75	129.56	<b>0.36</b>
TB	0.18	776.49	137.16	<b>0.57</b>

## Ethiopia

Numbers in italics are regional data substitutes due to lack of country data.

Table 41. Cost by commodity and client type(ART, PMTCT, OVC and TB)

2008 & 2009	Total MT procured	Weighted cost \$USD/MT	% Local purchase	% International
CSB	89414	501.13	0.00	100.00
MML	0	<i>400.03</i>	0.00	0.00
BEAN	27672.5	776.97	100.00	0.00
OIL	19349.1	1490.56	0.00	100.00
SUGAR	805	452.37	0.00	100.00

	Total MT procured	Weighted cost \$USD/MT	% Local purchase	% International
CSB2008	79444.9	505.20	0.00	100.00
CSB2009	9969.1	468.69	0.00	100.00
MML2008	0	0	0	0
MML2009	0	0	0	0
BEAN2008	13608.5	1152.70	100.00	0.00
BEAN2009	14064	413.41	100.00	0.00
OIL2008	16201.7	1575.70	0.00	100.00
OIL2009	3147.4	1052.29	0.00	100.00
SUGAR2008	391	431.8	0	100
SUGAR2009	414	471.8	0	100

	Food package \$/MT	Int weighted + LTSH transit/MT	Q+Q/MT	DSC/MT	ODOC/MT	ISC/MT	Total \$/MT of food package
<b>Adult ART</b>	505.3981037	223.6821746	2.3005846	13.039545	1.2056568	52.19382	<b>797.819889</b>
<b>Child ART</b>	586.3738425	223.6821746	2.3005846	13.039545	1.2056568	57.86213	<b>884.4639296</b>
<b>PMTCT</b>	522.7542767	223.6821746	2.3005846	13.039545	1.2056568	53.40876	<b>816.3909942</b>
<b>OVC</b>	687.1410576	223.6821746	2.3005846	13.039545	1.2056568	64.91583	<b>992.2848497</b>
<b>TB</b>	505.3981037	223.6821746	2.3005846	13.039545	1.2056568	52.19382	<b>797.819889</b>

	MT of specific food package/client/year	Total \$/MT OMB	\$/client/year	\$/client/day
Adult ART	0.13	797.82	105.70	<b>0.59</b>
Child ART	0.11	884.46	97.59	<b>0.54</b>
PMTCT	0.46	816.39	377.37	<b>0.70</b>
OVC	0.14	992.28	137.53	<b>0.38</b>
TB	0.18	797.82	140.93	<b>0.59</b>

## Djibouti

Table 42. Cost by commodity and client type (ART, PMTCT, OVC and TB)

2008 & 2009	Total MT procured	Weighted cost \$USD/MT	% Local purchase	% International
CSB	1756.8	476.65	0.00	100.00
MML	6390	368.72	0.00	100.00
BEAN	180	615.40	0.00	50.00
OIL	1518.7	1051.17	0.00	100.00
SUGAR	820	450.01	0.00	100.00

	Total MT procured	Weighted cost \$USD/MT	% Local purchase	% International
CSB2008	1223	509.80	0.00	100.00
CSB2009	533.8	400.70	0.00	100.00
MML2008	2380	375.00	0.00	100.00
MML2009	4010	365.00	0.00	100.00
BEAN2008	180	615.40	0.00	100.00
BEAN2009	0	0	0	0
OIL2008	1076.4	1156.60	0.00	100.00
OIL2009	442.3	794.60	0.00	100.00
SUGAR2008	702	446.7	0	100
SUGAR2009	118	469.7	0	100

	Food package \$/MT	Int weighted + LTSH transit/MT	Q+Q/MT	DSC/MT	ODOC/MT	ISC/MT	Total \$/MT of food package
<b>Adult ART</b>	454.2678321	189.3705894	1.7871359	75.587374	0.4032992	50.49914	<b>771.9153664</b>
<b>Child ART</b>	524.5917433	189.3705894	1.7871359	75.587374	0.4032992	55.42181	<b>847.1619514</b>
<b>PMTCT</b>	464.663235	189.3705894	1.7871359	75.587374	0.4032992	51.22681	<b>783.0384476</b>
<b>OVC</b>	589.0111507	189.3705894	1.7871359	75.587374	0.4032992	59.93117	<b>916.0907173</b>
<b>TB</b>	454.2678321	189.3705894	1.7871359	75.587374	0.4032992	50.49914	<b>771.9153664</b>

	MT of specific food package/client/year	Total \$/MT OMB	\$/client/year	\$/client/day
Adult ART	0.13	771.92	102.26	<b>0.57</b>
Child ART	0.11	847.16	93.48	<b>0.52</b>
PMTCT	0.46	783.04	361.95	<b>0.67</b>
OVC	0.14	916.09	126.97	<b>0.35</b>
TB	0.18	771.92	136.35	<b>0.57</b>

## Zambia

Numbers in italics are regional data substitutes due to lack of country data.

Table 43. Cost by commodity and client type (ART, PMTCT, OVC and TB)

2008 & 2009	Total MT procured	Weighted cost \$USD/MT	% Local purchase	% International
CSB	1728	506.55	28.71	71.29
MML	5070	268.42	97.18	2.82
BEAN	200	699.40	50.00	50.00
OIL	1770.6	1031.48	0.00	100.00
SUGAR	0	490.96	0.00	0.00

	Total MT procured	Weighted cost \$USD/MT	% Local purchase	% International
CSB2008	1630	506.40	57.42	42.58
CSB2009	98	509.00	0.00	100.00
MML2008	2891	298.00	100.00	0.00
MML2009	2179	229.18	94.36	5.64
BEAN2008	100	670.80	0.00	100.00
BEAN2009	100	728.00	100.00	0.00
OIL2008	1598.3	1061.50	0.00	100.00
OIL2009	172.3	753.00	0.00	100.00
SUGAR2008	0	0	0	0
SUGAR2009	0	0	0	0

	Food package \$/MT	Int weighted + LTSH transit/MT	Q+Q/MT	DSC/MT	ODOC/MT	ISC/MT	Total \$/MT of food package
<b>Adult ART</b>	424.2412602	243.6614008	0.89350486	30.697877	38.069872	51.62947	<b>789.1933894</b>
<b>Child ART</b>	505.8203321	243.6614008	0.89350486	30.697877	38.069872	57.34001	<b>876.4829964</b>
<b>PMTCT</b>	440.8377257	243.6614008	0.89350486	30.697877	38.069872	52.79123	<b>806.9516075</b>
<b>OVC</b>	536.340597	243.6614008	0.89350486	30.697877	38.069872	59.47643	<b>909.1396798</b>
<b>TB</b>	424.2412602	243.6614008	0.89350486	30.697877	38.069872	51.62947	<b>789.1933894</b>

	MT of specific food package/client/year	Total \$/MT OMB	\$/client/year	\$/client/day
Adult ART	0.13	789.19	104.55	<b>0.58</b>
Child ART	0.11	876.48	96.71	<b>0.54</b>
PMTCT	0.46	806.95	373.01	<b>0.69</b>
OVC	0.14	909.14	126.01	<b>0.35</b>
TB	0.18	789.19	139.40	<b>0.58</b>

## Ghana

Table 44. Cost by commodity and client type (ART, PMTCT, OVC and TB)

2008 & 2009	Total MT procured	Weighted cost \$USD/MT	% Local purchase	% International
CSB	4660	602.74	35.74	64.26
MML	2844.5	407.12	39.59	60.41
BEAN	1341	787.28	22.50	77.50
OIL	1655.4	1227.49	46.43	53.57
SUGAR	151.5	465.56	50.00	50.00

	Total MT procured	Weighted cost \$USD/MT	% Local purchase	% International
CSB2008	3174.5	650.40	51.76	48.24
CSB2009	1485.5	500.90	19.72	80.28
MML2008	1931	430.60	79.18	20.82
MML2009	913.5	357.50	0.00	100.00
BEAN2008	1149	822.80	45.00	55.00
BEAN2009	192	574.70	0.00	100.00
OIL2008	943.7	1321.60	47.90	52.10
OIL2009	711.7	1102.70	44.96	55.04
SUGAR2008	97	425.2	0	100
SUGAR2009	54.5	537.4	100	0

	Food package \$/MT	Int weighted + LTSH transit/MT	Q+Q/MT	DSC/MT	ODOC/MT	ISC/MT	Total \$/MT of food package
<b>Adult ART</b>	543.4750403	120.4422965	63.8591466	42.029869	14.526882	54.90333	<b>839.2365601</b>
<b>Child ART</b>	633.0877562	120.4422965	63.8591466	42.029869	14.526882	61.17622	<b>935.1221661</b>
<b>PMTCT</b>	558.5941971	120.4422965	63.8591466	42.029869	14.526882	55.96167	<b>855.4140579</b>
<b>OVC</b>	691.8053174	120.4422965	63.8591466	42.029869	14.526882	65.28645	<b>997.9499566</b>
<b>TB</b>	543.4750403	120.4422965	63.8591466	42.029869	14.526882	54.90333	<b>839.2365601</b>

	MT of specific food package/client/year	Total \$/MT OMB	\$/client/year	\$/client/day
Adult ART	0.13	839.24	111.18	<b>0.62</b>
Child ART	0.11	935.12	103.18	<b>0.57</b>
PMTCT	0.46	855.41	395.41	<b>0.73</b>
OVC	0.14	997.95	138.32	<b>0.38</b>
TB	0.18	839.24	148.24	<b>0.62</b>

## Mali

Numbers in italics are regional data substitutes due to lack of country data.

Table 45. Cost by commodity and client type (ART, PMTCT, OVC and TB)

2008 & 2009	Total MT procured	Weighted cost \$USD/MT	% Local purchase	% International
CSB	6215.8	467.21	0.00	100.00
MML	0	<i>400.03</i>	0.00	0.00
BEAN	0	<i>602.97</i>	0.00	0.00
OIL	579	1096.86	0.00	100.00
SUGAR	257	464.55	0.00	100.00

	Total MT procured	Weighted cost \$USD/MT	% Local purchase	% International
CSB2008	4675	488.90	0.00	100.00
CSB2009	1540.8	401.40	0.00	100.00
MML2008	0	0	0	0
MML2009	0	0	0	0
BEAN2008	0	0	0	0
BEAN2009	0	0	0	0
OIL2008	521.6	1138.50	0.00	100.00
OIL2009	57.4	718.50	0.00	100.00
SUGAR2008	96	447.2	0	100
SUGAR2009	161	474.9	0	100

	Food package \$/MT	Int weighted + LTSH transit/MT	Q+Q/MT	DSC/MT	ODOC/MT	ISC/MT	Total \$/MT of food package
<b>Adult ART</b>	465.8754814	253.9508718	3.54543204	72.086199	71.466742	60.68473	<b>927.6094573</b>
<b>Child ART</b>	533.9492953	253.9508718	3.54543204	72.086199	71.466742	65.4499	<b>1000.448438</b>
<b>PMTCT</b>	475.0546171	253.9508718	3.54543204	72.086199	71.466742	61.32727	<b>937.4311325</b>
<b>OVC</b>	612.2986968	253.9508718	3.54543204	72.086199	71.466742	70.93436	<b>1084.282298</b>
<b>TB</b>	465.8754814	253.9508718	3.54543204	72.086199	71.466742	60.68473	<b>927.6094573</b>

	MT of specific food package/client/year	Total \$/MT OMB	\$/client/year	\$/client/day
Adult ART	0.13	927.61	122.89	<b>0.68</b>
Child ART	0.11	1000.45	110.39	<b>0.61</b>
PMTCT	0.46	937.43	433.32	<b>0.80</b>
OVC	0.14	1084.28	150.28	<b>0.42</b>
TB	0.18	927.61	163.85	<b>0.68</b>

## Lao People's Democratic Republic

Numbers in italics are regional data substitutes due to lack of country data.

Table 46. Cost by commodity and client type (ART, PMTCT, OVC and TB)

2008 & 2009	Total MT procured	Weighted cost \$USD/MT	% Local purchase	% International
CSB	1435.5	473.37	18.79	81.21
MML	0	400.28	0.00	0.00
BEAN	0	699.91	0.00	0.00
OIL	351.9	1718.60	0.28	49.72
SUGAR	350	539.14	100.00	0.00

	Total MT procured	Weighted cost \$USD/MT	% Local purchase	% International
CSB2008	931.5	492.50	37.57	62.43
CSB2009	504	438.00	0.00	100.00
MML2008	0	0	0	0
MML2009	0	0	0	0
BEAN2008	0	0	0	0
BEAN2009	0	0	0	0
OIL2008	351.9	1718.60	0.57	99.43
OIL2009	0	0	0	0
SUGAR2008	180	521.8	100	0
SUGAR2009	170	557.5	100	0

	Food package \$/MT	Int weighted + LTSH transit/MT	Q+Q/MT	DSC/MT	ODOC/MT	ISC/MT	Total \$/MT of food package
Adult ART	496.3000455	184.6930855	2.50301956	72.700951	25.690227	54.73211	<b>836.6194407</b>
Child ART	572.5734748	184.6930855	2.50301956	72.700951	25.690227	60.07125	<b>918.23201</b>
PMTCT	510.7456324	184.6930855	2.50301956	72.700951	25.690227	55.7433	<b>852.0762186</b>
OVC	680.7828883	184.6930855	2.50301956	72.700951	25.690227	67.64591	<b>1034.016082</b>
TB	496.3000455	184.6930855	2.50301956	72.700951	25.690227	54.73211	<b>836.6194407</b>

	MT of specific food package/client/year	Total \$/MT OMB	\$/client/year	\$/client/day
Adult ART	0.13	836.62	110.84	<b>0.62</b>
Child ART	0.11	918.23	101.32	<b>0.56</b>
PMTCT	0.46	852.08	393.86	<b>0.73</b>
OVC	0.14	1034.02	143.31	<b>0.40</b>
TB	0.18	836.62	147.78	<b>0.62</b>

## Cambodia

Numbers in italics are regional data substitutes due to lack of country data.

Table 47. Cost by commodity and client type (ART, PMTCT, OVC and TB)

2008 & 2009	Total MT procured	Weighted cost \$USD/MT	% Local purchase	% International
CSB	2677.6	433.85	0.00	100.00
MML	0	400.28	0.00	0.00
BEAN	0	699.91	0.00	0.00
OIL	973.7	1691.49	0.00	100.00
SUGAR	480	458.58	100.00	0.00

	Total MT procured	Weighted cost \$USD/MT	% Local purchase	% International
CSB2008	832.6	515.50	0.00	100.00
CSB2009	1845	397.00	0.00	100.00
MML2008	0	0	0	0
MML2009	0	0	0	0
BEAN2008	0	0	0	0
BEAN2009	0	0	0	0
OIL2008	636.3	2108.10	0.00	100.00
OIL2009	337.4	905.80	0.00	100.00
SUGAR2008	260	441.3	100	0
SUGAR2009	220	479	100	0

	Food package \$/MT	Int weighted + LTSH transit/MT	Q+Q/MT	DSC/MT	ODOC/MT	ISC/MT	Total \$/MT of food package
Adult ART	478.6807491	134.138329	2.53006337	50.833205	6.346172	47.077	<b>719.6055151</b>
Child ART	550.2373056	134.138329	2.53006337	50.833205	6.346172	52.08596	<b>796.1710306</b>
PMTCT	493.9760552	134.138329	2.53006337	50.833205	6.346172	48.14767	<b>735.9714926</b>
OVC	659.8865135	134.138329	2.53006337	50.833205	6.346172	59.7614	<b>913.495683</b>
TB	478.6807491	134.138329	2.53006337	50.833205	6.346172	47.077	<b>719.6055151</b>

	MT of specific food package/client/year	Total \$/MT OMB	\$/client/year	\$/client/day
Adult ART	0.13	719.61	95.33	<b>0.53</b>
Child ART	0.11	796.17	87.85	<b>0.49</b>
PMTCT	0.46	735.97	340.20	<b>0.63</b>
OVC	0.14	913.50	126.61	<b>0.35</b>
TB	0.18	719.61	127.11	<b>0.53</b>