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BEST ANALYSIS – MALAWI BELLMON ESTIMATION STUDIES FOR TITLE II (BEST) PROJECT



DECEMBER 2008

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The author's views expressed in this publication do not necessarily reflect those of the United States Agency for International Development or the United States Government.

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ACRONYMS

ADMARC	Agricultural Development and Marketing Corporation
ADP	Agricultural Development Program
BGM	Bakhresa Grain and Milling
CAADP	Comprehensive African Agricultural Development Programme of NEPAD
CDSO	Crude Degummed Soybean Oil
CET	Common External Tariff
COMESA	Common Market for Eastern and Southern Africa
CRS	Catholic Relief Services
EAC	East African Community
FFP	Food for Peace
FTA	Free Trade Area
GMO	Genetically Modified Organisms
GoM	Government of Malawi
HIPC	Heavily Indebted Poor Countries
HRW	Hard Red Winter Wheat
IPP	Import Parity Price
MBS	Malawi Bureau of Standards
MYAP	Multi-Year Assistance Program
NEPAD	New Partnership for Africa's Development of the African Union
NFDM	Non-Fat Dry Milk
OVC	Orphans and Vulnerable Children
UMR	Usual Marketing Requirements
USAID	US Agency for International Development
USDA	US Department of Agriculture
VAC	Vulnerability Assessment Committee
WFP	World Food Programme

PREFACE

During the months of September and October 2008, the newly formed Bellmon Estimation Studies for Title II (BEST) team undertook a study to generate recommendations for a Bellmon determination made by USAID's Office of Food for Peace.

The purpose of the analysis is to determine that the distribution and monetization of U.S. agricultural commodities provided for use in Malawi during FY09 through United States Government (USG) food aid assistance programs (including Title I, Title II, Food for Peace (FFP), Food for Progress (FFPr), and 416(b)) meet the criteria set forth in the **Food For Peace Act and Related Statutes**, including the Bellmon amendment. In particular, the study will provide guidance for compliance with the stipulations as defined in Section 402 and 403, as stated below:

SEC. 402. ø 7 U.S.C. 1732 DEFINITIONS.

As used in this Act:

(2) AGRICULTURAL COMMODITY.—The term “agricultural commodity,” unless otherwise provided for in this Act, includes any agricultural commodity or the products thereof produced in the United States, including wood and processed wood products, fish, and livestock as well as value-added, fortified, or high-value agricultural products. Effective beginning on October 1, 1991, for purposes of Title II, a product of an agricultural commodity shall not be considered to be produced in the United States if it contains any ingredient that is not produced in the United States, if that ingredient is produced and is commercially available in the United States at fair and reasonable prices.

SEC. 403. ø7 U.S.C. 1733 GENERAL PROVISIONS.

(a) PROHIBITION.—No agricultural commodity shall be made available under this Act unless it is determined that—

- (1) adequate storage facilities will be available in the recipient country at the time of the arrival of the commodity to prevent the spoilage or waste of the commodity; and
- (2) the distribution of the commodity in the recipient country will not result in a substantial disincentive to or interference with domestic production or marketing in that country.

(b) IMPACT ON LOCAL FARMERS AND ECONOMY.—The Secretary or the Administrator, as appropriate, shall ensure that the importation of United States agricultural commodities and the use of local currencies for development purposes will not have a disruptive impact on the farmers or the local economy of the recipient country.

(c) TRANSSHIPMENT.—The Secretary or the Administrator, as appropriate, shall, under such terms and conditions as are determined to be appropriate, require commitments designed to prevent or restrict the resale or transshipment to other countries, or use for other than domestic purposes, of agricultural commodities donated or purchased under this Act.

(d) PRIVATE TRADE CHANNELS AND SMALL BUSINESS.—Private trade channels shall be used under this Act to the maximum extent practicable in the United States and in the recipient countries with respect to—

- (1) sales from privately owned stocks;

- (2) sales from stocks owned by the Commodity Credit Corporation; and
- (3) donations.

Small businesses shall be provided adequate and fair opportunity to participate in such sales.

(e) **WORLD PRICES.**—

(1) **IN GENERAL.**—In carrying out this Act, reasonable precautions shall be taken to assure that sales or donations of agricultural commodities will not unduly disrupt world prices for agricultural commodities or normal patterns of commercial trade with foreign countries.

Sec. 403 FOOD FOR PEACE ACT 1–20

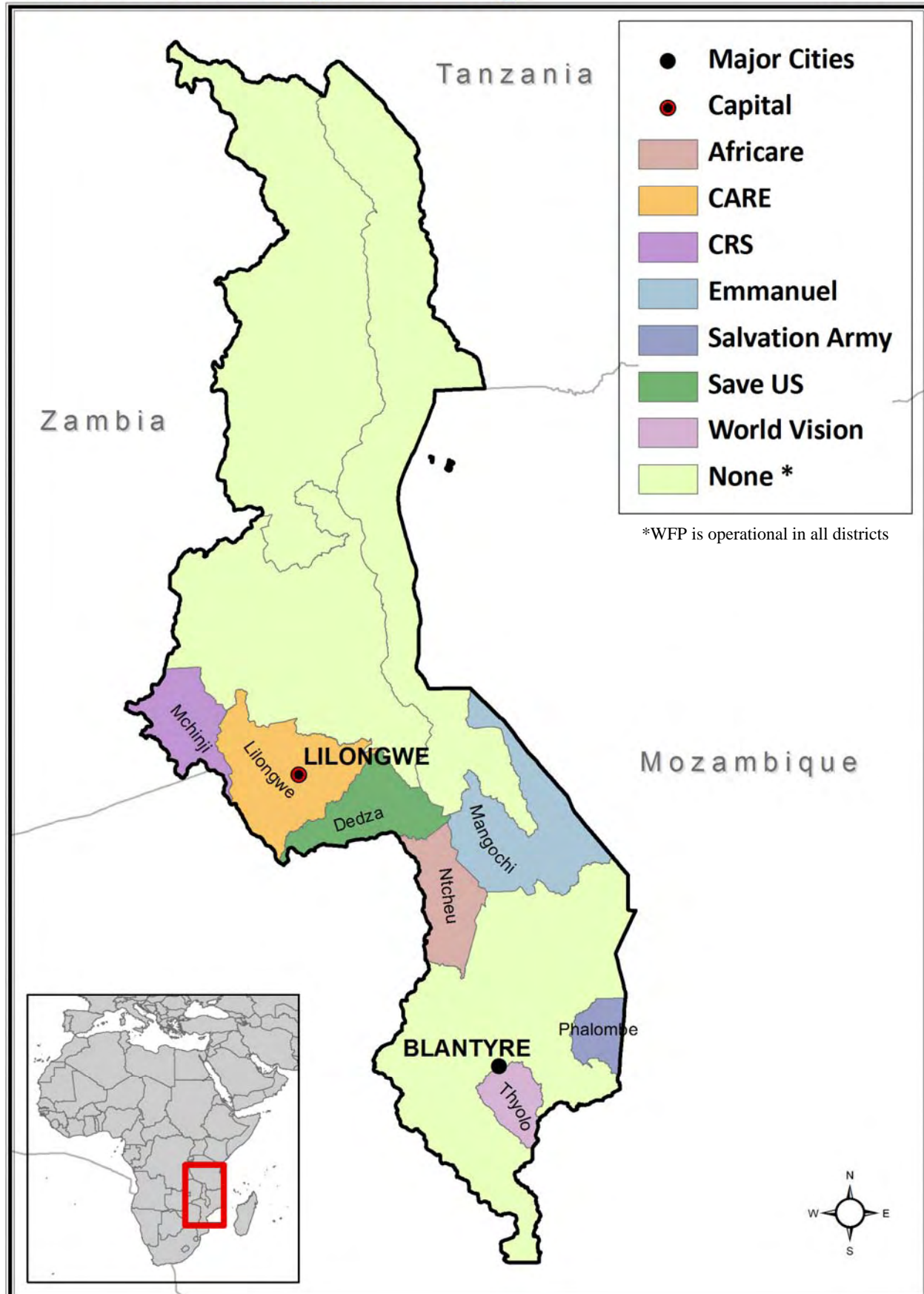
(2) **SALE PRICE.**—Sales of agricultural commodities described in paragraph (1) shall be made at a reasonable market price in the economy where the agricultural commodity is to be sold, as determined by the Secretary or the Administrator, as appropriate.

In this regard, the “Bellmon Amendment” of 1977 to section 401.b of P.L. 480 (the “Bellmon Amendment”), specify that no agricultural commodity shall be made available under this act unless it is determined that:

1. Adequate storage facilities are available in the recipient country at the time of exportation of the commodities to prevent the spoilage or waste of the commodity;
2. The distribution of the commodities in the recipient country will not result in a substantial disincentive or interference with domestic production or marketing in that country, and
3. The importation of U.S. agricultural commodities and the use of local currencies for development purposes will not have a disruptive impact on the farmers or the local economy of the recipient country.

FFP/CS Food Aid Program Coverage

Malawi



1.0 EXECUTIVE SUMMARY

This is a preliminary determination study that includes recommendations for commodities for monetization in Malawi in support of the upcoming Multi-Year Assistance Program (MYAP). This monetization analysis is being released in advance of the distribution analysis, which will be available in January 2009.

The commodities recommended for monetization for the coming MYAP were selected on the following bases:

- 1) They are available in accordance with PL 480 and USAID regulations;
- 2) There is significant domestic demand in Malawi;
- 3) Domestic demand is not being met by local production; therefore supply shortfalls are filled through commercial importation and food aid;
- 4) There is competition for the commodity(ies) recommended; and
- 5) In all cases the negotiated price must be a reasonable market price in the economy where the agricultural commodity is to be sold; that is, a price competitive with price paid for by commercial importers for a comparable commodity of a comparable quality to avoid potential local market disruptions and production disincentives.

Summary Analysis

Over the five-year period studied (2003-2007), food aid programs from all sources have contributed more than 500,000 MT¹ of food to Malawi, of which the U.S. supplied 17 percent. Monetization has become an increasingly important source of funding for Title II non-emergency development programs. Crude degummed soybean oil (CDSO) and hard red winter wheat (HRWW) are the two commodities that have been monetized during the current non-emergency program. Monetization of CDSO has been a consistent 3,000 MT per year, while HRWW has increased from zero in 2005 to 19,140 MT in 2008.

The following commodities were analyzed for their suitability for monetization under current market conditions in Malawi:

Wheat. The principal wheat importers of Malawi estimate current demand to be 170,000 MT per year and project that it will increase to 200,000 MT over the course of the next MYAP. This estimate is more than double the reported GoM import statistics for 2007, as well as data from Malawi food balance sheet estimates, both of which total approximately 80,000 MT. Traders in Malawi insist that reported GoM statistics are significantly less than actual imports, and attribute the discrepancy to unreported cross-border trade and inaccurate data compilation by customs agents. For the purposes of this study, however, we are basing our calculations on the more conservative estimate of 80,000 MT per year. Malawi produces less than three percent of this volume, with the balance supplied through commercial imports, primarily from Argentina and Australia, and from donors.

¹“Report on Shipments by Members of the Food Aid Convention,” Prepared for the Food Aid Committee by the Secretariat of the International Grains Council (reports dated July 2004, September 2005, July 2006, August 2007 and May 2008).

Since the beginning of the current non-emergency program in 2005, a single wheat monetization was carried out by the I-LIFE Consortium in April 2008 and resulted in a sale of 9,140 MT at a negotiated price of US\$390/MT delivered at the port of Beira, Mozambique. The monetization price was 28 percent less than the estimated import parity price (IPP) of US\$538 at the time of the bid. The disparity between the IPP and the monetized price is explained in part by the rapid fluctuations in international wheat prices at the time, which increased over 200 percent during the 12 months preceding the bid. One bid below an estimated IPP during a period of unprecedented commodity price increases should not be the basis to judge future wheat monetization performance. However, it must also be noted that an NGO, Planet Aid, monetized three shipments of USDA wheat between 2006 and 2008 at prices well below prevailing market rates. Malawi's two large importers/millers have expressed interest in participating in future calls forward. With prices stabilizing nearer to historical levels, future monetization tenders should result in offers at or near IPP. Since wheat is Malawi's most significant food import, it is recommended for monetization in the upcoming MYAP.

Vegetable Oil. Domestic consumption for all vegetable oils is estimated to be 38,000 MT per year. Approximately 20-25 percent of this volume is supplied through local oilseed processing. The supply deficit will continue to be met by commercial imports (26,000 MT, sourced primarily from Argentina for crude soybean oil, and Italy for refined soybean oil) and monetized crude degummed soybean oil (CDSO), of which USAID has supplied 3,000 MT/year on average for the past four years. There have been six calls forward for U.S. CDSO since February 2006, with negotiated prices approximately 90 percent of estimated IPP at the time of each monetization. Competition for vegetable oil is between two large importer/refiners, and two other firms indicated that they are considering investing in refinery construction. With sufficient import demand and prospects for adequate competition for future calls forward, CDSO is also recommended for monetization in the upcoming MYAP.

Milk Powder. Domestic dairy processors are operating well below capacity due to an insufficient domestic supply of fresh milk. Milk powder imports, primarily whole fat, averaged 2,000 MT over the past five years, but have decreased significantly in the past two years primarily due to high international prices and, also due to increased domestic milk production. Processors have indicated that they would be interested in purchasing milk powder if prices returned to the historical level of US\$2,500 per MT. Any monetization would need to comply with the International Code of Marketing of Breastmilk Substitutes and any World Health Assembly resolutions pertinent to the sale or distribution of breastmilk substitutes. NFDM may be sold for industrial use as an ingredient in processed foods, baked goods, yogurt, etc. NFDM cannot substitute for breastmilk or be used for products represented or locally perceived as breastmilk substitutes. It cannot be sold for direct market distribution, for example, in small tender sales, and cannot be sold directly to consumers. In addition, NFDM cannot be sold to known manufacturers or marketers of breastmilk substitutes or replacement foods with breastmilk substitute production facilities.

Given anticipated import needs and competition among buyers, HRWW, CDSO and whole milk powder are recommended as the commodities for monetization. Up to 8,000 MT of HRWW, 3,800 MT of CDSO, and 200 MT of whole milk powder could be monetized.

2.0 FOOD AID HISTORICAL OVERVIEW

2.1 SUMMARY OF OVERALL FOOD AID

According to recent Food Aid shipments reports,² Malawi received 503,977 MT in total food aid between 2003 and 2007. Of this amount, 69 percent was supplied by the EU and 17 percent by the U.S., with smaller amounts supplied by Norway, Japan and Canada. More than two-thirds of total food aid consisted of maize-based products.

Emergency

Emergency food aid has constituted approximately 67 percent (340,000 MT) of total food aid in Malawi over the last five years. The EU has been the major supplier of emergency food aid, accounting for 286,000 MT of this amount. WFP has handled most of the distribution.³ The majority of emergency food aid since 2003 was supplied in 2005 and early 2006 following consecutive poor maize harvests.

Non-emergency

One hundred sixty four thousand metric tons of non-emergency food aid was supplied to Malawi during this period. The U.S. has been the major contributor of non-emergency food aid, supplying 79,000 MT, and the EU next, providing 67,770 MT. Monetized food accounts for approximately one-third of all non-emergency food aid.

2.2 USAID/USDA

2.2.1 CS TARGET GEOGRAPHIC AREAS

Since 2005, the Title II non-emergency food aid program has been managed by a seven-member consortium, I-LIFE, comprised of the following organizations: Africare, CARE, CRS, Emmanuel International, Salvation Army, Save the Children and World Vision. This consortium is currently operating in seven districts of Malawi (as detailed in CS Coverage Map on page 1) implementing agricultural production, nutrition, health and capacity-building projects directed at food insecure and otherwise vulnerable households. In addition to the Title II program, Planet AID has been implementing a variety of projects, such as the Farmers Club and the Teachers Training College under USDA's Food for Progress program.

² Ibid

³ Ibid

2.2.2 HISTORICAL FOOD AID AMOUNTS

Monetized

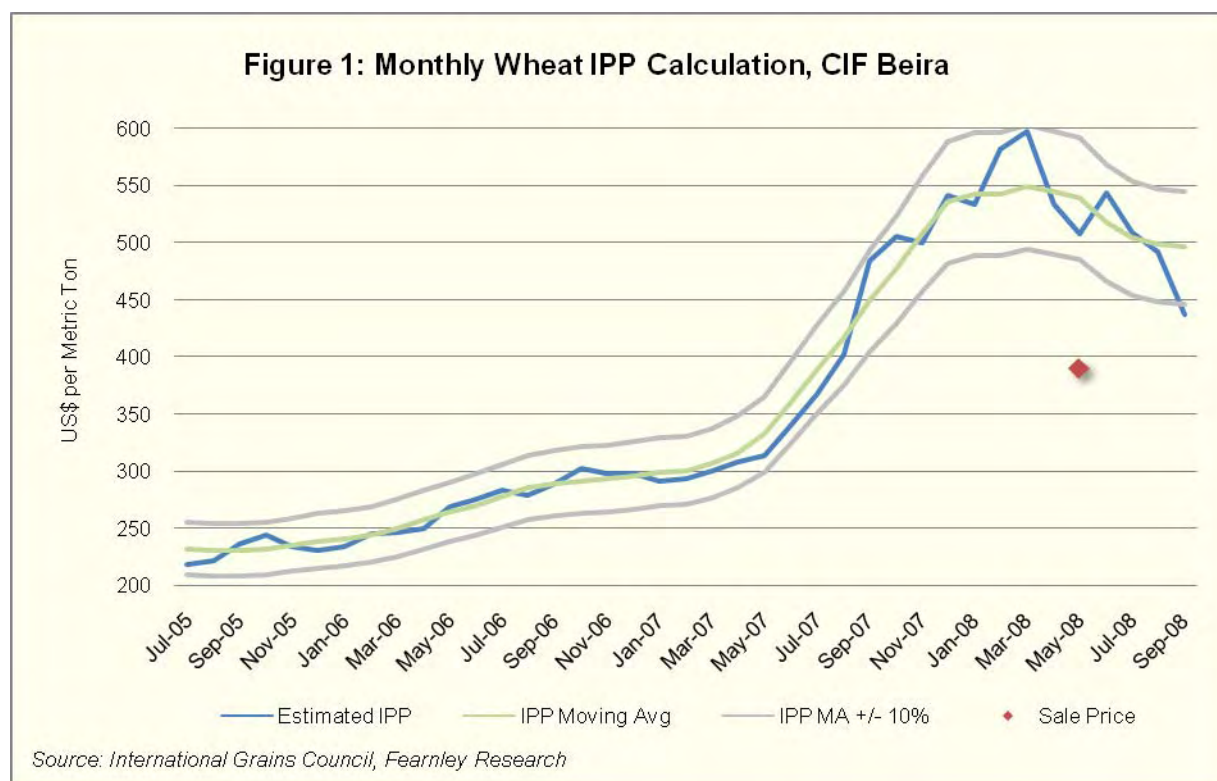
Table 1: USAID/USDA Historical Monetized Food Aid Amounts

Commodity	Program	Cooperating Sponsor	2005		2006		2007		2008	
			MT	\$000s	MT	\$000s	MT	\$000s	MT	\$000s
Wheat	USAID	I-LIFE (CRS)	-	-	-	-	-	-	9,140	3,564
Wheat	USDA	Planet Aid	-	-	10,000	2,500	10,000	3,200	10,000	5,150
Subtotal Wheat			-	-	10,000	2,500	10,000	3,200	19,140	8,715
CDSO	USAID	I-LIFE (CRS)	3,090	1,661	2,970	1,625	2,910	1,894	3,050	3,205
TOTAL			3,090	1,661	12,970	4,125	12,910	5,094	22,190	11,920

Source: I-LIFE, Planet Aid (DAPP)

Wheat

Following an increase in Malawi's domestic milling capacity, wheat grain has become an increasingly important commodity over the last three years. Planet Aid has monetized 30,000 MT of USDA wheat (10,000 MT per year) since 2006, and I-LIFE monetized 9,140 MT in April 2008. Two companies, Bakhresa Grain Milling (BGM) and Capital Foods, are the sole importers and processors of wheat grain. While both companies have participated in previous monetization bidding processes, BGM has been awarded all contracts for wheat to date, based on competitive bids as well as the company's financial and logistical capacity to handle large shipments.



The April 2008 call forward of 9,140 MT was monetized at a price of \$390/MT at the port of Beira, Mozambique. This price represented 67 percent cost recovery against the commodity and freight (C&F) cost to USAID of \$580/MT. When compared to the estimated historical moving average IPP, calculated using commodity and shipping cost data from Argentina (one of Malawi's principal suppliers of wheat), the margin is narrower. As the graph in Figure 1 indicates, the monetized price received in April 2008 was 72 percent of the estimated IPP (\$538/MT) at the time of the sale. Since the data analyzed is historical, and daily market volatility was high during the period analyzed (data indicates over a 200 percent increase in HRWW prices in the 12 months preceding the sale), a moving average IPP was used.

The monetized wheat prices received by Planet Aid of \$250/MT in 2006, \$320/MT in 2007 and \$515/MT in 2008 are not included in Figure 1 since these were under USDA's program. In addition, these transactions included inland transportation costs, and therefore were not comparable to the monetization price received by I-LIFE. When factoring inland transportation costs, these prices represented approximately 54 percent, 61 percent and 64 percent of the estimated IPP at the respective times of sale.

Details of IPP Calculation

1. Uses as a base price the FOB value of the commodity from a common source country including quality adjustment factor when applicable
2. Applies average insurance rate of 0.3% FOB value
3. Freight calculation includes the following:
 - a. Source country to Durban: assuming Handysize 20,000 – 30,000 MT Vessel (Source: IGC)
 - b. Durban to destination (Beira/Nacala): assuming Handysize 53,000 MT Vessel with a capacity of 47,250 (Source: Fearnleys Research)
 - i. Fuel consumption: 33 MT/day at sea
 - ii. Best and worst case scenarios are averaged to estimate rate
 1. First scenario: assumes 4 days at sea with a full load of 47,250
 2. Second scenario: assumes 8 days at sea (to account for empty backhaul) and a load of just 10,000 MT (common food aid shipment)
 - c. Freight forwarders fee: 5%
4. Port disbursement fees: \$15/MT

Vegetable Oil

Crude Degummed Soybean Oil (CDSO) has been the most commonly monetized commodity in Malawi. Sales contracts over the last four years were awarded to Unilever, which owns an oil refinery in Blantyre. A second company, Capital Oil Refineries Inc. (CORI), also located in Blantyre, had successfully bid on a previous call forward of CDSO, but the shipment was cancelled. The cancellation resulted in a contract dispute and the subsequent withdrawal of CORI as a potential CDSO buyer.

The I-LIFE consortium has received, on average, 3,000 MT/year of CDSO from USAID for monetization, representing approximately eight percent of total domestic demand. Prices received from monetization ranged from \$575/MT in January 2007 to \$1,290/MT in June 2008.

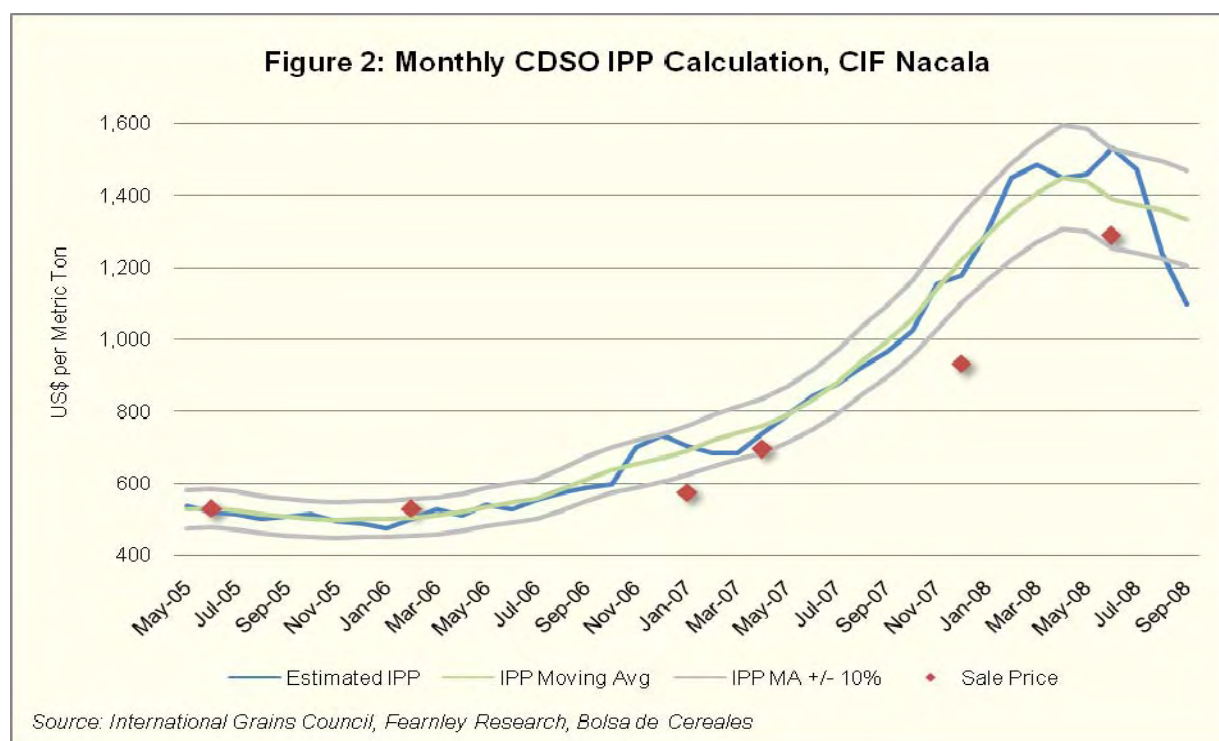
The difference in price paid and estimated IPP is illustrated in Figure 2 and ranges from 76 percent to 105 percent of IPP (see Annex III for detailed IPP

Table 2: CDSO Monetization History

Ship Date	Jun-05	Feb-06	Jan-07	Apr-07	Dec-07	Jun-08
Call Forward	530	530	575	697	933	1,290
IPP	528	505	690	758	1,222	1,390
% Difference	100%	105%	83%	92%	76%	93%

Source: Cooperating Sponsors

calculation). There is competition in the vegetable oil refining business between Unilever and Capital Oil Refineries (which has indicated to the study team that it would participate in future tenders despite its past contract problems). Two other firms have indicated to the study team their plans to build refineries.



Distributed

Commodities distributed through USAID Title II programs have typically included a combination of corn meal, corn soy blend (CSB), pinto beans and vegetable oil, to provide vulnerable households with a safety-net meal supplement rich in energy and protein. Title II-supported distribution programs in seven districts in Malawi currently feed up to 10,000 beneficiaries per month.

Table 3: USAID/USDA Historical Distributed Food Aid Amounts

Commodity	Program	Cooperating Sponsor	2005		2006		2007		2008	
			CI	FFW	CI	FFW	CI	FFW	CI	FFW
Corn Meal	USAID	I-LIFE (CRS)	3,704	2,604	4,744	3,268	5,332	3,494	3,570	300
CSB	USAID	I-LIFE (CRS)	741	-	949	-	1,030	-	883	-
Pinto Beans	USAID	I-LIFE (CRS)	370	260	474	327	533	349	526	30
Veg. Oil	USAID	I-LIFE (CRS)	256	-	349	-	365	-	339	-
TOTAL			5,071	2,864	6,516	3,595	7,261	3,844	5,318	330

Source: I-LIFE; CI: Chronically Ill; FFW: Food For Work

2.3 WFP AND OTHER DONOR PROGRAMS

The World Food Program (WFP) is currently distributing food aid (Table 4) in all 28 districts of Malawi, with over 70 percent of the deliveries concentrated in the southern region. During the past three years, WFP has sourced 75 percent of its non-emergency food aid programs from the EU, with the balance sourced from the U.S., Australia and Norway.⁴ WFP mainly targets child beneficiaries through school feeding and food-insecure individual feeding programs, in addition to managing initiatives for HIV-affected individuals and refugees. The school feeding program is supported in part by the USDA's Food for Education program, which has provided approximately 8,500 MT/year of CSB for the last two years.

Table 4: WFP Historical Distributed Food Aid Amounts (MT)

Commodity	2004	2005	2006	2007	2008	Total
Cereals (maize, rice, sorghum)	68,477	115,041	90,746	52,113	17,558	343,935
Corn-Soya Blend	10,984	7,086	13,817	10,027	9,650	51,564
Pulses	8,885	9,998	9,579	4,780	2,504	35,746
Vegetable Oil	2,288	1,526	5,569	1,822	452	11,656
Other	512	159	151	550	97	1469
TOTAL	91,146	133,810	119,862	69,292	30,261	444,370

Source: WFP

⁴ Ibid

3.0 DISTRIBUTION/STORAGE

To date, Malawi's USAID Title II monetization has taken place in the Mozambican ports of Beira (wheat) or Nacala (vegetable oil). There are adequate clean and secure storage facilities for commodities not monetized at the port or for distribution commodities that must be stored for a long period of time (Table 5).

Table 5: Malawi Covered Storage Capacity

Location	Owner	Area (M ²)	Capacity (MT)
Blantyre, Malawi	CRS	1,400	4,000
Blantyre, Malawi	BGM	n/a	3,000
Blantyre, Malawi (Oil)	Capital Oil	n/a	2,500
Lilongwe, Malawi	CRS	1,800	5,000
Lilongwe, Malawi	Capital Foods	n/a	12,000
Nationwide, Malawi	ADMARC*	145,570	457,900
Total In-Country Storage		148,770	484,400
Beira, Mozambique	Corneder	15,000	35,000
Nacala, Mozambique	BGM**	n/a	40,000
Nacala, Mozambique		21,000	50,000
Nacala, Mozambique (Oil Tank)	MONAPO	n/a	2,400
Nacala, Mozambique (Oil Tank)	Unilever	n/a	2,000
Total Storage at Port		36,000	129,400

* Approximately 50% available upon request

** Currently under construction

Facilities listed for Beira and Nacala, Mozambique are at Port

Road and Transport Analysis

Most, if not all, PL 480 commodity shipments destined for Malawi arrive at the ports of Nacala (800 km from Blantyre) and Beira (900 km from Blantyre) in Mozambique. The main points of entry from Mozambique into Malawi are Mwanza, which handles commodities entering from Beira, and Nayuchi, which is the entry point for commodities entering by rail (when in operation) from Nacala.

Malawi has 14,597 km of roads, of which only 2,773 (20 percent) are paved and in good condition. The internal road network from Mwanza to Blantyre and Lilongwe – currently the main transport route for PL 480 commodities – is paved and adequately maintained.

During the ongoing I-LIFE development program, all CDSO was imported through Nacala, which despite some seasonal port congestion, is likely to be the preferred port for the future program. Although Nacala has road and rail links to Blantyre, the rail system, which has an estimated capacity of 8,000 MT per month, is undergoing repairs on a 77-km stretch from Cuamba to Entre-Lagos.⁵ Roads are paved

⁵ Trains currently move at a snail's pace along the 77-km stretch, which was damaged during the 16-year Mozambican civil war that ended in 1992.

between Nacala and Nampula and about 120 kilometers beyond, although more than 200 kilometers of road onward to Malawi are gravel-based, and transport delays are likely during the rainy season. Several sections of the Nacala road are currently under upgrades.

All cargo from Beira to Malawi is hauled by road. The dormant Beira rail line, an important route for Malawi before the outbreak of Mozambique's civil war, requires extensive rehabilitation and the Dona Ana rail bridge requires replacement.

4.0 POLICY ISSUES

4.1 TRADE AGREEMENTS

Malawi is a member of the Common Market for Eastern and Southern Africa (COMESA), which comprises 19 states in the region. As a member of COMESA Free Trade Area (FTA)⁶, Malawi maintains preferential customs duties on imports from other COMESA members while applying a Common External Tariff (CET) for non-member countries.⁷

Malawi is also a member of the Southern African Development Community (SADC)⁸, whose goal is to further socio-economic and political cooperation among 14 southern African states. SADC introduced its Free Trade Zone in 2000, with Malawi as a signatory, although it was not officially launched until August 2008. While member states have successfully lowered or removed some trade barriers and improved both the region's institutional and physical infrastructure, the SADC FTA is still under development and a Trade Monitoring and Compliance Mechanism is being established to support that effort. In theory, tariffs have been removed on 85 percent of members' traded products, while some commodities will retain their duty until 2012.

In 2008, SADC agreed to establish a free trade zone with the East African Community (EAC) and COMESA, to include all members of each of the organizations. It is anticipated that achieving a completely free trade zone will not occur during the period of this MYAP.

4.2 REGULATORY CLIMATE

For cereals and pulses such as wheat and beans, the Malawi Government requires import permits from the Department of Research in the Ministry of Agriculture, Irrigation and Food Security. The permits stipulate phytosanitary and declaration requirements for each commodity. For pulses, the Malawi government requires that all commodities be quarantined for a fixed period before distribution for the purpose of disease and pest control. All edible commodities must be certified as fit for human consumption by the Malawi Bureau of Standards (MBS).

The Government of Malawi and CRS, the lead Cooperating Sponsor for commodity importation and monetization under the I-LIFE Consortium, have an agreement for tax exemption of commodities for distribution. Tariff rates for monetized commodities are applied on bill of lading cost and freight (CFR) values, and compounded. NGO charitable and religious organizations were previously able to obtain customs duty waivers when importing capital assets such as motor vehicles and computers. In 2007, the

⁶ The COMESA FTA comprises Djibouti, Egypt, Kenya, Madagascar, Malawi, Mauritius, Sudan, Zambia and Zimbabwe

⁷ CRS Bellmon, July 2007

⁸ SADC Countries include Angola, Botswana, DR Congo, Lesotho, Malawi, Mauritius, Namibia, RSA, Seychelles, Swaziland, Tanzania, Zambia, and Zimbabwe.

government announced that the duty-free status of religious and other charitable organizations would be decided on a case-by-case basis.⁹ The current tariffs for food aid commodities are detailed in Table 6.

Table 6: Malawi Tariff Schedule for Food Aid Commodities

Commodity	Customs Code	1	2	3	4	5	6	7
Milk Powder (<1.5% Fat)	0402.10.00	10%	10%	Free	5%	10%	-	17.5%
Milk Powder (>1.5% Fat)	0402.21.00	10%	10%	1%	5%	10%	-	17.5%
Milk Powder (Other)	0402.29.00	10%	10%	1%	10%	10%	-	17.5%
Wheat and Meslin (Durum)	1001.10.00	Free	Free	Free	Free	Free	-	Exempt
Wheat and Meslin (Other)	1001.90.10	Free	Free	Free	Free	Free	-	Exempt
Soya-bean Oil (Crude)/a	1507.10.00	25%	10%	Free	10%	10%	-	17.5%
Soya-bean Oil (Other)/b	1507.90.00	25%	25%	5%	25%	25%	20%	17.5%

Source: Malawi Revenue Authority (MRA) – customs codes used for trade data

a. Rates for crude oil specify de-gummed, or not

b. Rate shown is for soybean oil. Rates for other raw materials vary slightly

Column Descriptions: 1,2-Base Rates, 3-COMESA Countries, 4-SADC Countries, 5-SADC South Africa, 6-Excise tax, 7-Surtax

Note that tariffs, duties and taxes presented here are subject to change. Therefore, Title II program implementers should be constantly monitoring this information.

4.3 FOOD STANDARDS

Food, including food aid, is subjected to quality testing by the Malawi Bureau of Standards (MBS), whether produced locally or imported. The MBS is a member of the International Bureau of Standards and its requirements are based on Codex Standards.

4.4 GENETICALLY MODIFIED ORGANISMS (GMO) POLICY

The study attempted to clarify the Government of Malawi policy on the importation of GMO products, but the results are inconclusive. The policy, as it appears in previous Bellmon assessments by CRS, indicates that “the GoM requires that all imported commodities be certified GMO-free, or be processed (i.e., milled, in the case of cereals). This policy effectively prohibits the importation of ‘seedable’ commodities that may be GMO, and may subsequently enter into agricultural production.”¹⁰ This would effectively make genetically modified soybean ineligible as a PL 480 commodity.

Discussions with officials at the Ministry of Agriculture and the Chitedze Research Station, National Research Council, and Bunda College of Agriculture, led to various interpretations on Malawi’s GMO policy. At the moment, Government officials follow the regulations posted in the gazette notification dated Oct. 19, 2007.¹¹

⁹ Malawi FY08 Bellmon Analysis, CRS, July 20, 2007

¹⁰ Ibid.

¹¹ Biosafety Act; Biosafety (Management of Genetically Modified Organisms) Regulations; October 19, 2007

4.5 EXPORT TRADE BANS

In 2008, the GoM enacted several agricultural commodity export bans. One such ban, on private maize trading and exporting, came into effect during the course of this study. Although amended a week later to accommodate smaller traders, it was still in effect when this study was published (October 2008). Other commodities for which imports are banned include: rice, soybeans, cottonseed, and sorghum. Such bans demonstrate GoM concerns over food security (while also reflecting the influence of certain commodity sectors), have a potential disincentive effect on production and agriculture investment, and demonstrate the need for long-term strategies that will strengthen free trade, protect national food supplies, and establish a favorable trading environment.

4.6 NATIONAL STRATEGIES

The five-year **Agricultural Development Program (ADP)**, part of the Agricultural Policy Framework, identifies five priority areas of focus to achieve sustainable agricultural growth and development:¹²

- Food security and risk management;
- Commercial agriculture, agribusiness and market development;
- Sustainable land and water management;
- Research, technology, and dissemination, and
- Institutional development and capacity building.

The MOAFS, Department of Crop Production, has a five-year rolling **Strategic Plan to Improve Crop Production** (2006/07 – 2011/12) with an aggressive agenda to increase production and crop yields 50 percent by 2012. Each crop covered under this study has its own strategic plan.¹³

Malawi is also aligned with the New Partnership for Africa's Development (NEPAD) and has adopted the **Comprehensive African Agricultural Development Programme (CAADP)**, which provides guidelines to invest a minimum of 10 percent of the annual budget to achieve 6 percent agricultural growth per annum through four mutually supporting Pillars:

- Sustainable land and water management;
- Improved market access and integration;
- Increased food supplies and reduced hunger;
- Research, technology generation, dissemination and adoption.

¹² The Agricultural Development Program (ADP), 2008-2012, MOAFS

¹³ Strategic Plan to Improve Crop Production, 2006/07 – 2011/12, MOAFS

5.0 SELECTION OF PRODUCTS

To identify potential products for monetization, import statistics were analyzed to indicate which commodities are consistently imported in sufficient quantity and values to meet the requirements of the new MYAP. Based on the five-year average imports summarized in the table below and the analysis conducted by the team, wheat, CDSO, and milk powder are considered candidates for monetization.

Table 7: Malawi's Top Commercial Agricultural Imports

No	Commodity	Five-year Average (2003-2007)	
		MT	\$000s
01	Wheat	71,370	21,439
02	Crude soya-bean oil	14,913	12,782
03	Wheat or meslin flour	22,980	8,482
04	Milk Powder	2,003	5,431
05	Maize flour	18,182	4,153
06	Crude palm oil	4,528	3,908

Source: COMESA, National Statistics Office (NSO)

6.0 PRODUCT-SPECIFIC ANALYSIS

This study analyzes the production and market issues for three commodities proposed for monetization: hard red winter wheat (HRWW), crude degummed soybean oil (CDSO), and whole-fat milk powder. HRWW wheat and CDSO have been monetized in Malawi since 1988, and whole-fat milk powder has been included in the analysis to provide an option to diversify the monetization portfolio. Also included in the study, but eliminated for consideration as prospects for monetization, are maize, soybeans, sorghum, rice, and concentrated fruit juice.

6.1 HARD RED WINTER WHEAT

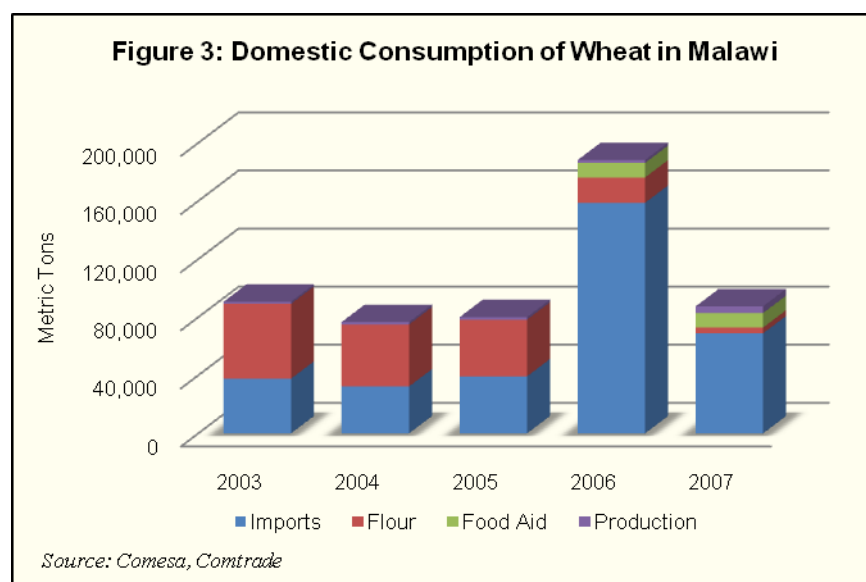
6.1.1 DOMESTIC PRODUCTION

According to national production statistics published by the Ministry of Agriculture and Food Security, Malawi produces small volumes of wheat, averaging just 2,300 MT annually over the last five years. Yields are very low even on commercial farms. Due to good rains and subsidized fertilizers for wheat as well as maize, yields increased to 2.3 MT per hectare in 2007, but reportedly have fallen to 1.6 MT per hectare in 2008.

6.1.2 EXTERNAL TRADE

Commercial imports constitute the majority of domestic wheat supply in Malawi. Due to increased milling capacity in 2006, imports of wheat grain have increased dramatically, from 30,000 MT in 2004 to 80,000 MT in 2007, significantly reducing wheat flour imports. There are major discrepancies, however, between GoM reported figures and estimates by private sector sources. In

2006, GoM reported 170,000 MT commercial imports while industry sources, including the two main millers and grain traders, indicate that total consumption of wheat during that period ranged from 100,000 to 125,000 MT. Furthermore, the industry estimate for 2008 wheat imports is 170,000 MT, a sharp contrast to the 2007 GoM figure of just 80,000. Experts who follow the grain markets in Malawi indicate that imports are closer to those stated by the industry. There is some informal trade, mainly with Zambia,



that may explain a portion of this difference, but the main reason given for the discrepancy is incomplete and inaccurate data collection by customs which then gets reported to the Central Statistics Office. For the purposes of this study, GoM data is being used until these discrepancies can be reconciled.

According to national statistics, major wheat suppliers to Malawi in 2007 included Mozambique (37 percent by volume), Argentina (28 percent), and United Arab Emirates (22 percent). Since neither Mozambique nor UAE produce wheat but are major transit points, these statistics reflect transshipments, not country of origin. Major suppliers of imported wheat year-on-year are Argentina and Australia. Two U.S. food aid programs have also added wheat grain to the import mix. USDA Food for Progress has been working with U.S.-based Planet Aid (Humana DAPP in Malawi) monetizing 10,000 MT per year in 2006, 2007, and 2008 (total of 30,000 MT). In 2008, CRS, the lead PVO for the I-Life Consortium, monetized an additional 9,140 MT under USAID's Title II program.

Trade data show a gradual increase in the export of wheat and wheat flour to other countries in the region, representing seven percent of total imports and production in 2007. The two companies that will likely be involved in future monetization tenders both indicate that they do not currently have export contracts for flour outside of Malawi. However, they do admit that wholesalers and/or smaller traders probably conduct informal cross-border trade with Zambia and Mozambique.

6.1.3 DOMESTIC MARKETS

Local demand for wheat is estimated using GoM import data and information from Malawi's two main flour mills. Capital Foods Limited in Lilongwe is a new mill that became operational in 2006, while Bakhresa Grain and Milling (BGM) in Blantyre was established in 2004 as a result of the privatization of Blantyre Grain and Milling. BGM and Capital Foods estimate that, in the past year, they have purchased a combined 170,000 MT of wheat grain to produce 127,500 MT of flour.

Table 8: Estimated Wheat Requirement, 2008

Company	Wheat Input (MT)	Wheat Flour Output (MT)
BGM	100,000	75,000
Capital Foods Ltd.	70,000	52,500
Total	170,000	127,500

Source: Private Sector Interviews (September 2008)

BGM has plans to replace aging equipment and increase factory capacity from 250 MT per day to 500 MT per day by September 2009, thereby doubling milling capacity, from 100,000 MT per year to 200,000 MT per year. With market growth for wheat flour estimated by the commercial millers

to be up to 10 percent per year, the BGM factory may be at full capacity of 200,000 MT in seven years (2016). BGM indicated that the current "latent demand" for wheat flour is 200,000 MT per year, and is dependent on purchasing power, the economy, market prices, and regional exports. The annual maize harvests, which have been well above average in 2007 and 2008, have increased rural and urban purchasing power.

Both BGM and Capital Foods have confirmed to the team that demand for wheat flour in the rural areas is increasing due to the *mandazi* (fried dough) trade and increased purchasing power from improvements in maize harvests. However, the increase in international commodity prices has resulted in the wholesale cost of a 50-kg bag of flour increasing in one year, from \$24 in 2007 to \$49 in September 2008.

Both companies procure locally grown wheat delivered ex-factory by traders. Capital Foods procured about 500 MT of local wheat this year, while BGM procured 1,000 MT at 50 MK per kg (\$0.35/kg or \$350 per metric ton).

6.1.4 PRICES

In 2006, wheat prices increased gradually throughout the year, peaking at \$303 per metric ton in November. After continuing to rise from \$300 to more than \$500 in 2007, prices peaked at \$600 per metric ton in March 2008 before declining to a current level of \$438 (September 2008). Global commodity prices are expected to continue to decline back to historical levels because of improved harvests by key producer countries and the global recession.

6.1.5 IMPACT ANALYSIS

Volume of HRW Wheat in proportion to imports and production

In addition to domestic production of 2,300 MT, it is estimated by the Malawi milling industry that demand in Malawi will require imports of up to 170,000 MT of wheat during CY 2008, and up to 200,000 MT per year over the following five years. Import data from the GoM Central Statistics Office indicates that for CY 2007, the most recent year available, total imports were 82,800 MT. Domestic production remains an insignificant portion of the total wheat market.

Impact on Local Production

Small volumes of wheat have been grown in Malawi for many years but with limited markets due to dependence on flour imports. With privatization, new investment in the domestic milling industry since 2006 and a growing domestic market, there has been a surge in wheat grain imports. The Ministry of Agriculture has a wheat production strategy, but has provided little in the way of technical support to implement it. Malawi's wheat production will not keep up with demand due to the small size of farms, lack of mechanization, and local preferences for other cash and food security crops, particularly maize. Therefore, imports will continue to play a major role in supplying the Malawian market with wheat during the next MYAP.

Impact on Local Markets

Results of the recent monetization of HRWW by CRS/I-LIFE are summarized in Figure 1 and Table 1 in Chapter 2. The price received was US\$390/MT for 9,140 MT CIF Beira. This price was 67 percent of the cost to USAID, and 72 percent of the estimated IPP in April 2008. The monetized HRWW was compared against the market equivalent of the commercial import contracts from Argentina and Australia, and these statistics are presented in Annex II. During the past three years, BGM has successfully outbid Capital Foods for this competitive tender. Both companies have expressed interest in bidding on future tenders.

Seasonality and delivery issues

Timing of wheat imports through PL 480 is tied to commercial requirements and has no seasonal variance (demand remains constant throughout the year). Inventory is maintained through regularly scheduled

shipments, based on mill throughput capacity. The local wheat harvest occurs in June/July. Both millers buy local wheat as it is delivered to them by traders; however, volumes are limited and unpredictable.

Degree of substitution among other commodities

At this point, statistical data are insufficient to conclude that wheat imports are having a negative substitution effect on consumption of other commodities. A study conducted on price elasticity and food demand in Malawi¹⁴ concluded that as prices of one staple increase, rural consumers quickly shift their consumption to less expensive staples. BGM and Capital Foods have estimated that the commercial growth of wheat flour is expected to continue at a rate of up to 10 percent a year. By ensuring that Title II wheat is monetized at IPP, there should be no disincentive effect. If, however, wheat is monetized significantly below IPP, and Title II wheat continues to comprise a larger share of the total market, then market disincentive and substitution could result.

Relation to other U.S. food aid imports or local purchases

Over the last three years, Planet Aid has monetized 30,000 MT of wheat in Malawi through the USDA PL 480 Food for Progress program. USDA currently has another three-year (2009-2012), \$15 million program under the proposal review, which would add \$5 million in annual HRWW food aid imports to any amounts provided by USAID.

6.1.6 STORAGE CAPACITY

Capital Foods Limited in Lilongwe leases a warehouse with a capacity of 12,000 MT. BGM owns a silo complex with a capacity of 40,000 MT and a warehouse with a capacity of 3,000 MT at the port in Nacala (Mozambique). Its Blantyre Mill has a storage capacity of 30,000 MT. Therefore, there is adequate storage to avoid spoilage and waste of wheat food aid.

¹⁴ *Income and Price Elasticities of Food Demand and Nutrient Consumption in Malawi*, Ecker and Qaim, 2008

6.2 CRUDE DEGUMMED SOYBEAN OIL (CDSO)

6.2.1 DOMESTIC PRODUCTION

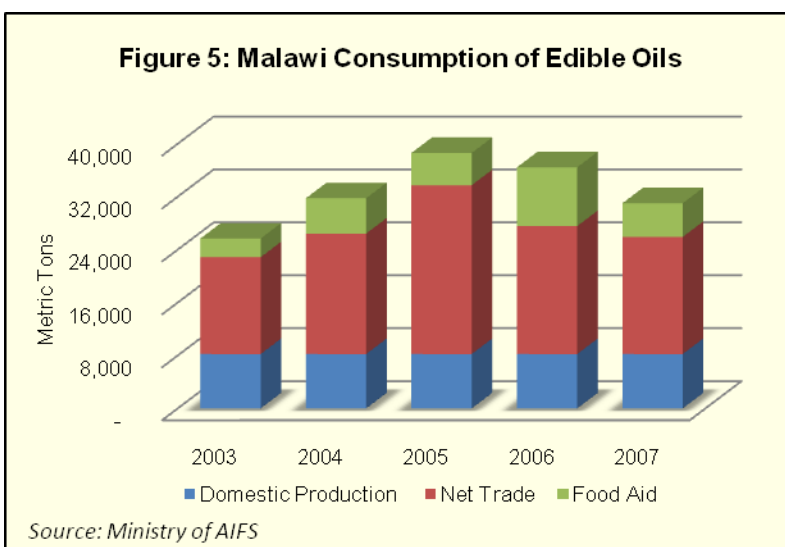
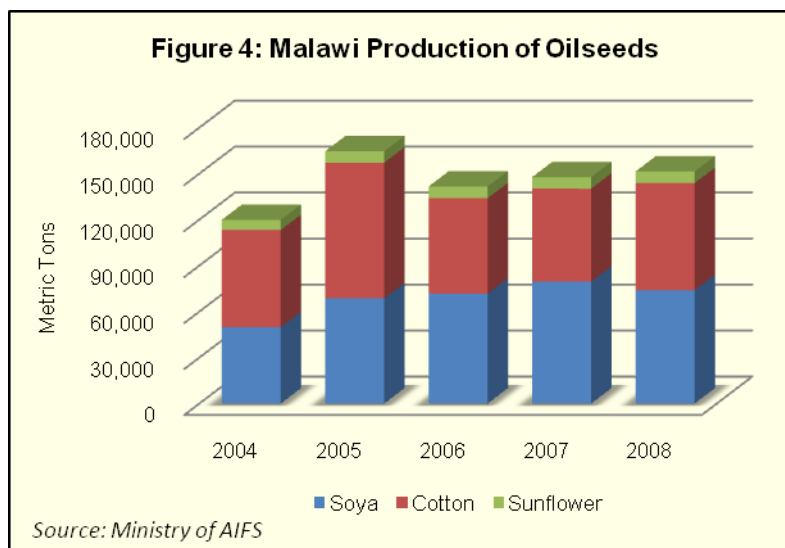
The three main commercial oil seed crops in Malawi are soybeans, sunflower, and cottonseed.

Groundnuts, pressed for oil, are a minor crop and are not included in this study.

Soybean production has increased steadily over the past five years, peaking in 2007 at 71,295 MT (Figure 4). Total area planted also peaked in 2007 at nearly 80,000 hectares, 60 percent more than the area planted in 2004. The demand for soy is driven by a growing animal feed industry, especially poultry, which has expanded rapidly in recent years. Two main feed companies (CAPS in Lilongwe, and Proto Feeds in Blantyre) procure over 9,000 MT of locally produced soybean every year for feed, with oil sold as a by-product.

Since 2006, annual sunflower production has averaged 5,700 MT per year, most of which is either exported to South Africa for bird feed or sold locally for confectionery use. Little is used for processing into edible oil. Currently, no sunflower is used in the animal feed industry or by the major edible oil refineries. However, a refinery in Lilongwe has plans to cultivate 1,000 hectares of sunflower, using varieties such as those provided by Panar (RSA) and Monsanto (U.S.) with high extraction ratios. With commercial farms taking the lead, sunflower production may therefore experience a recovery in the near future.

Cottonseed, although inexpensive and in ample supply, has limited use in edible oil production, due to its unappealing color and taste. Oil & Protein of Blantyre is the only company procuring significant quantities of cottonseed, reportedly buying 4,200 MT, which yielded 780 MT of oil (18.5% extraction rate) in 2007. Considering the relatively low price of seed at \$0.27 per



kilogram¹⁵ and Malawi's annual production of over 30,000 MT of seed, cottonseed oil could be a reasonable source of inexpensive cooking oil, especially for the unbranded bulk market.

Although official statistics are not reported on domestic edible oil production from oilseed pressing, industry sources estimated the historical average to be approximately 8,200 MT per year.

6.2.2 EXTERNAL TRADE

In addition to 8,220 MT of oils refined from local oilseed crops by the feed industry, nearly 80 percent of the 38,000 MT of cooking oil consumed annually is imported refined and bottled, or in crude form that is later refined in-country. Figure 5 shows a peak of crude and refined oil imports in 2005 with subsequent decrease. Industry sources indicate that imports of crude oil likely exceeded 31,000 MT in 2007, almost 60 percent more than the 19,500 MT indicated in official trade data. Consumption data from FAO that indicate 38,000–48,000 MT over the past four years supports the industry position. One buyer (CORI) attributed the difference to informal cross-border trade of crude oils that is not documented, as is the case for wheat; thus, GoM statistics may be incomplete.

Trade data show no exports of crude or refined oil in 2006 and 2007. Although informal exports are probable, importers maintain these make up a very small percentage of the overall market.

6.2.3 DOMESTIC MARKETS

Unilever and CORI of Blantyre are the larger processors that import crude oil (CDSO or equivalent) for refining and sale. They do not procure domestically produced oilseed, nor do they import seed for crushing. Oil and Protein Limited procures up to 4,200 MT of local cottonseed for crushing and refining into cooking oil (brand name, "Super Star") and imports an additional 3,000 MT of crude oil annually from Argentina. CAPS is primarily an animal feed company that procures locally produced soybeans for crushing, using the cake for feed and refining the oil for the branded oil market under the brand name "Mulawe."

Table 9: Edible Oil Processing (MT per Year)

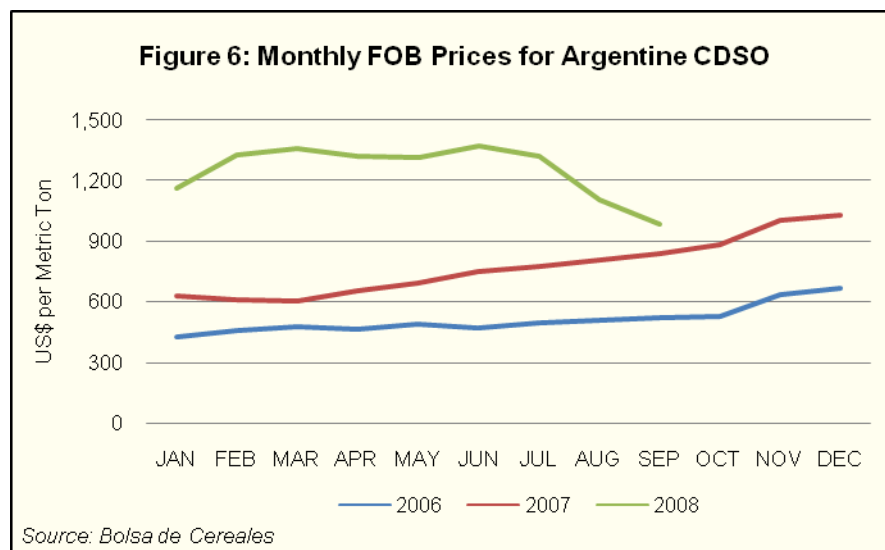
Company	Capacity	Actual
Unilever	8,500	6,000
CORI	60,000	24,000
CAPS Ltd.	15,600	1,020
Oil and Protein	7,200	7,200
Total	84,700	38,220

Source: Private Sector Interviews

Cooking oil markets are defined as "branded" or "unbranded," with the branded market reported to be about 8,000 MT per year, although research shows it may be as high as 14,000 MT. The unbranded bulk market targets the institutional and rural markets, packaged in 20-liter containers and 200-liter drums. It is estimated that this segment represents as much as 60 percent of the edible oil market.

Previous assessments indicated that significant new oil processing may commence in 2008. The two companies with plans, BGM and Rab Processors, have not yet implemented their oil refining investment plans, and are therefore not a factor in the market.

¹⁵ Cotton seed price was \$0.16/kg in 2007



6.2.4 PRICES

The majority of CDSO, when not sourced through the PL 480 program, is purchased from Argentina. CDSO has followed similar price patterns as other commodities over the last three years, increasing steadily during 2006 and 2007, before jumping to nearly \$1,500/MT in 2008 (Figure 6). This represents an increase of 300 percent

over 2006 prices. Since June 2008, however, prices have fallen sharply and are currently \$1,070 per metric ton and are projected to continue to fall back to historical levels.

6.2.5 IMPACT ANALYSIS

Volume of PL 480 CDSO in proportion to imports and production

In addition to the 8,000 MT of edible oil that is refined domestically, it is estimated that Malawi imported up to 30,000 MT of equivalent refined oil (crude and refined combined) during CY 2008. Industry sources project that this market will grow to 40,000 MT per year over the next five years. It is estimated that volumes of PL 480 Title II CDSO imports under the forthcoming 2009–2014 MYAP could range from 3,500 to 5,000 MT per year.

Impact on Local Production

Locally produced oilseeds have seen an expanding market share over the past four years with soybean and cottonseed leading the way. During the same period, the I-LIFE Consortium has been importing CDSO and refined oil. Local production of oilseed crops, especially soybean, is being driven by the animal feed market and to a lesser degree by the edible oil market. Cottonseed is a by-product of lint production. The team does not anticipate that imports of CDSO at the levels anticipated would have a significant disincentive effect on either crop.

Impact on Local Markets

Over the past four years, the I-LIFE consortium has imported and monetized with Unilever approximately 3,000 MT of edible oils per year at prices ranging from \$530/MT in 2005 to \$1,290/MT in 2008, providing eight percent of total edible oil supply. The last three calls forward recovered from 68 percent to 79 percent of the cost to USAID, while price comparison to IPP ranged from 76 percent to 93 percent (Section 2, Figure 2). While monetized CDSO made up only eight percent of total edible oil imports in 2007, the amount purchased by Unilever represented over 50 percent of their total annual output of refined oil.

The largest edible oil refining company in Malawi, Capital Oil Refining Inc, has expressed interest in participating once again after a five-year hiatus following a contract dispute and court case with CRS over a delivery cancellation. The company's re-entry into the program would provide improved competitiveness and monetization returns.

The private sector is cautiously but optimistically proceeding with edible oil refining investments. Rab Processors and BGM have plans for new refining plants. Oil & Protein plans to increase capacity from 600 MT per month to 1,700 MT per month. CORI and CAPS have similar plans to improve underutilized plant capacity. These factors will increase Malawi's demand for unrefined vegetable oils at the expense of refined oils. Trade data indicates that refined oil imports are dropping from a high of 3,449 MT in 2005 to a low of 665 MT in 2007.

Seasonality and delivery issues

The timing of PL 480 CDSO imports is tied to commercial plant requirements and has no seasonal variance (demand remains constant throughout the year).

Degree of substitution among other commodities

Substitution of imported products for domestically produced goods is not at issue since Malawi's oilseeds production is low and insufficient to meet local demand. Domestic production is used either by local refining industry or artisanal processors.

Relation to other food aid imports or local purchases

USDA has a three-year (2009–2012) \$15 million program currently under review for approval. This could add \$5 million (4,500 MT at current IPP) in annual CDSO imports if that commodity is selected for monetization. Africare, a member of the I-LIFE consortium, has applied for 2,730 MT of CDSO at a value of \$3,972,150 one call forward per year (average of 910 MT each) for the next three years, beginning in 2008. This will increase the total PL 480 share of the 38,000 MT by an additional 10 to 15 percent.

Based on numerous interviews, no other donor program, WFP or other food aid agency has plans to import CDSO.

6.2.6 STORAGE CAPACITY

Unilever, the current buyer of PL 480 CDSO, has 2,000 MT storage capacity at the port of Nacala, Mozambique. CORI, the only other company with financial and operational capacity to participate has a storage capacity of 2,500 MT. This is sufficient to store volumes that have been monetized in the past if delivered in a timely manner.

6.3 MILK POWDER

6.3.1 DOMESTIC PRODUCTION

Although Malawi does not produce powdered milk, its liquid milk sector is currently experiencing a revival, producing over 41,000 liters of liquid milk per day nationwide during peak production. An estimated 85 percent of this volume is produced in the Southern Region. It is estimated that an additional 2,000-4,000 MT of UHT milk is sourced from within the region and internationally¹⁷. Malawi dairy farmers and

consumers have seen a significant increase in milk prices in recent years,¹⁸ combined with a 300 percent increase in production since 2000. Estimated processing capacity of the five main dairy plants in Malawi is provided in Table 10. Total annual production sold through milk bulking groups, as reported by milk producers associations, increased from 5.7 million liters in 2003 to 8.6 million liters in 2007. With an additional 20 percent consumed or sold locally, total liquid milk production is estimated at 10.3 million liters. When combined with imported liquid and milk powder, estimated annual consumption in 2007 was 25.6 million liters.

Table 10: Daily Output of Liquid Pasteurized Milk

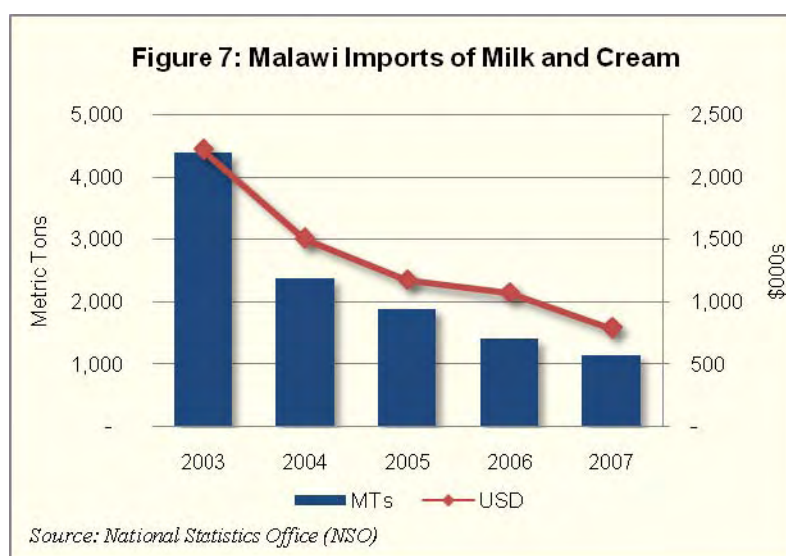
Dairy	Location	Liters per Day
Lilongwe Dairy	Lilongwe	5,000
New Capital Dairy	Lilongwe	3,000
Dairbord Malawi	Blantyre	24,000*
Suncrest Creameries	Blantyre	8,000-10,000
Northern Dairy	Mzuzi	1,000
TOTAL DAILY		41,000-43,000¹⁶

Source: Private Sector Interviews (September 2008)

*Peak Season

6.3.2 EXTERNAL TRADE

Malawi imports on average 60 percent of its domestic milk requirements, in either liquid or powdered form. Two thousand two hundred MT of liquid milk (UHT) was imported on average over the past five years from three neighboring African countries: Zimbabwe (from Daribord's parent company Daribord Zimbabwe¹⁹), Zambia (from Parmalat); and South Africa (mostly from Clover). As shown in Figure 7, import volumes and values have been declining,



¹⁶ The output difference can be attributed to the significant seasonal change in production

¹⁷ NSO dairy import data

¹⁸ Prices increased from MK 10/l to MK 32/l from 2001 to 2007. This a 220% increase, well above the inflation factor estimated at 50-60% for the same period; "Southern Region Dairy Market Study"; SHMPA, Kadale Consultants, September 2007.

¹⁹ 72% of all liquid milk imports come from Zimbabwe

reflecting the growth of Malawi's dairy industry, the decline of Zimbabwe's and milk powder imports.

Malawi imports all of its milk powder requirements, averaging about 2,000 MT per year over the past five years, the equivalent of 15.3 million liters of whole milk.²⁰ The 2007 import data showed a steep decline to 1,384 MT, attributed to the unprecedented price increases for milk powder.²¹

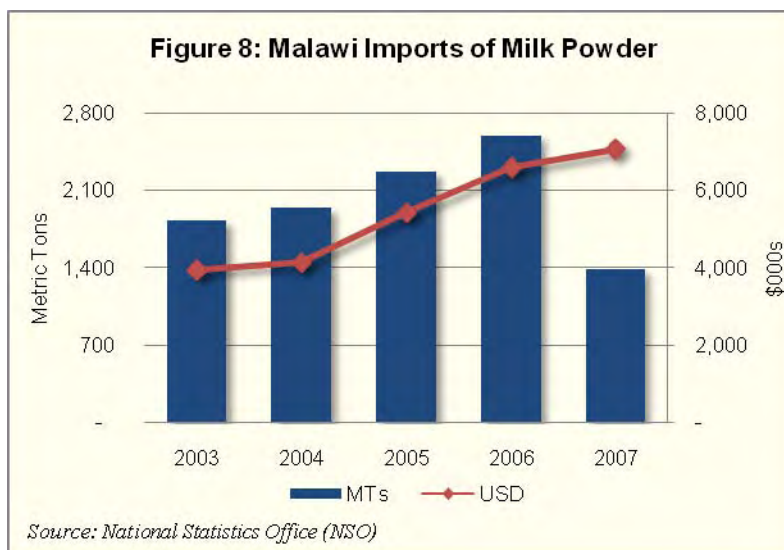
The EU price of whole milk powder peaked in September 2007 at \$5,500/MT but has since begun to fall.²² It is anticipated that 2008 import volumes will exceed 2007 levels, and perhaps return to 2006 levels (average price of \$2,538/MT). Trade data indicate that very little, if any, milk powder is formally exported from Malawi to neighboring countries, although there is a small amount that is informally traded across borders.

While some NFDM is imported, full fat milk powder is the product of choice in Malawi, accounting for 90 percent of total imports.

6.3.3 DOMESTIC MARKETS

Milk powder has two distinct markets: the first as a milk substitute, and the second as a commodity for reconstituting milk products by dairy companies. According to a report commissioned by Land O' Lakes in March 2008,²³ there are 10 suppliers of full cream and fat-filled powdered milk in Malawi, although five main companies handle the bulk of importing and domestic sales:

- IMCO importing from Northern Ireland under the brand Kerry Gold;
- Nestle (global) under the brand name NIDO;
- Food Products Limited importing Cowbell (France) and Miski from Ireland;
- Rab Processors, selling Chisangala and Classic brands (source unknown);
- Universal Industries, importing Anchor brand from New Zealand



²⁰ Irish Dairy Board, conversion of full fat milk powder to liquid milk: 1MT = 7,637 lt.

²¹ Despite the drop in overall volume, the total value in 2007 still exceeded \$7 million – average price was \$5,100/MT.

²² A procurement quote for September 2008 indicated that the price of Full Cream Milk Powder from New Zealand was \$3,695/MT CFR Lilongwe

²³ Market Survey, Dairy Processors Association, Jason Agar, Kadale Consultants, March 20th, 2008

Milk Powder Specifications

Partly skimmed milk powder: Milk from which fat has partly been removed and contains between 1.5% and 26% milk fat.

Skimmed milk powder: Milk from which almost all the fat has been removed and contains not more than 1.5% milk fat.

Standardized (adjusted) milk: Milk in which fat and/or protein has been so adjusted as to give a final material conforming to the requirements for fat and/or protein as specified.

Whole or full cream milk powder: This is the milk from which no fat has been removed and contains between 26% and 42% milk fat.

Despite recent price spikes that occurred in 2007-2008, powdered milk is highly competitive with fresh milk in the marketplace. Powdered milk has several characteristics that define it as a separate and, often preferred, product from local milk as it: is easily stored and non-perishable; does not require expensive cooling equipment (and related energy costs); is more efficiently transported due to lower unit weight per unit of liquid milk; and can be sold in small sizes, which works particularly well in Malawi's rural sector. According to one assessment carried out for the Dairy Processors' Association, "Even when powders are approximately 20-25 percent more expensive per unit of milk, they are still outselling pasteurized milk in low-income areas."²⁴ It can be assumed that powdered milk will become more competitive as its price continues to decline.

Milk powder is also competitive against long-life milk, even though the latter shares the advantages of long-term storage. Long-life milk remains more expensive per unit, more costly to transport, and until recently, was not packed in sizes that the majority of consumers in Malawi could afford. Lilongwe Dairies now offers a 250-ml pack, although powdered milk is still preferred for small-quantity use in rural communities, where it is more easily marketed.

Milk Processors

Some sources in Malawi claim the recent resurgence of the smallholder dairy can be attributed to the rise in milk powder prices beginning in 2006, resulting in a decline in its use by the processing sector. There is strong sentiment among producers that "...world prices for milk powder are set to remain high; if there were falls in powder prices, this would also bring powder back in as a major competitor to liquid milk at processor level."²⁵

Malawi's two largest dairy plants, Daribord Malawi and Lilongwe Dairies, are operating under capacity, by 42 percent and 50 percent, respectively. At the time of this study, Daribord indicated that, because of the high cost of imported milk powder, it purchased just 96 MT per year from local suppliers for use in yogurt and ice cream – stating that it was too expensive to use for reconstituting into liquid milk. The company's long-term marketing strategy is to increase the volume of its high-margin products – ice cream, yogurt, and cheese, in order to double its powdered milk requirement from 8 to 16 MT per month, or 192 MT per year. Lilongwe Dairy indicated that it may procure up to 50 MT per month to increase volumes offered of UHT and reconstituted milk lines.

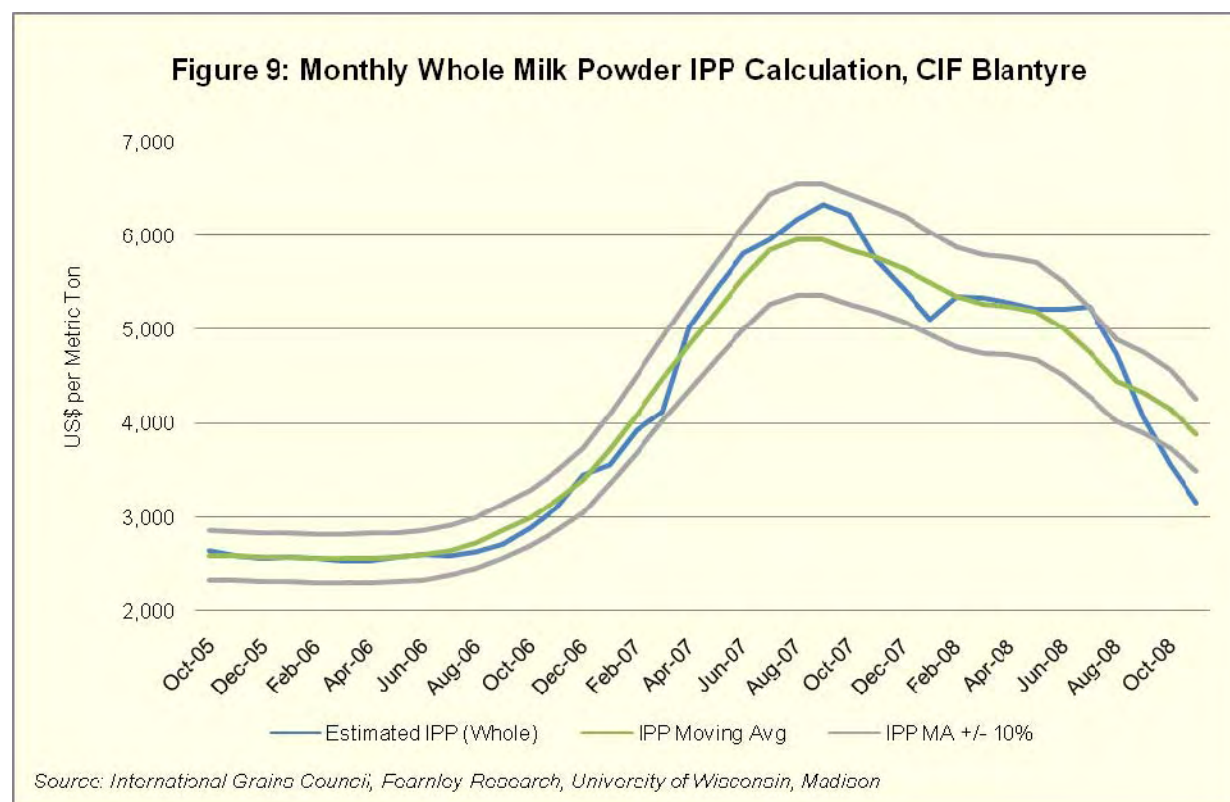
²⁴ Market Survey, Dairy Processors Association, Jason Agar, Kadale Consultants, March 20th, 2008, page 34.

²⁵ Southern Region Dairy Market Study; SHMPA, Kadale Consultants, September 2007.

Judging from the potential demand from these two major companies, and estimated demand from the remaining four processors, the dairy processing sector could use up to 800 MT per year of whole milk powder for reconstituting into their processed products.

6.3.4 PRICES

Estimated milk powder import parity prices peaked in September 2007 at more than \$6,000/MT and have since dropped off to levels consistent with 2006 (Figure 9).



6.3.5 IMPACT ANALYSIS

Volume of Milk Powder in proportion to imports and production

Malawi has imported on average 2,000 MT of whole powdered milk each year for the past five years, except in 2007 when imports declined to 1,384 MT due to price increases. Demand in the area of 2,000 MT per year is expected in the future with import volumes following both population growth and the growth of the dairy industry. Estimated volumes of Title II whole milk powder imports under the forthcoming 2009-2014 MYAP could range between 350 MT (approximately US\$1.1 million per year) and 700 MT per year (US\$2.2 million per year),²⁶ representing between 17 percent to 35 percent of the

²⁶ Based on an average of \$3,162 per metric ton

total imported milk powder market by volume (10 to 20 percent of the overall domestic milk market as expressed in milk powder equivalent).²⁷

Impact on Domestic Production

There is no domestic production of milk powder in Malawi, nor is any expected in the foreseeable future. Increasing processing plant capacity utilization rates with milk powder would decrease each plant's production costs, increase profitability through fuller use of plant capacity, maintain the national industrial base and lower consumer prices for dairy products and thereby spur demand. However, the Chairman of the Shire Highland Milk Producers Association and the Malawi Milk Producers Association took a protectionist stance by stating unequivocally that he is not in favor of the monetization of milk powder in Malawi, noting that "it is well recognized that the surplus of cheap, highly subsidized European milk powder over the last two decades has been a significant constraint to the development of African milk production." Land O' Lakes/Malawi, which is working on an USAID program to support the development of the dairy industry, and smallholder milk production in particular, also made it clear that it does not support milk powder for monetization. However, milk powder is not subsidized, would be sold at the competitive world price, and the processing industry would be severely under capacity (and uncompetitive) without milk powder imports for reconstituting. Because of the strong need for additional milk to meet domestic demand, Malawi imports could continue to increase.

Impact on Domestic Markets

Milk powder would compete directly with commercial milk powder imports and locally produced pasteurized milk. Full cream powder milk is imported under the international brands of Anchor (New Zealand), Kerry Gold (Ireland), Nido (Nestle-Swiss), and Cowbell (France). Three companies (Pharmacare/Aspen Nutritional, Nestle, and Tiger Foods) also supply specialized vitamin-enhanced powders for baby feeds and supplements.²⁸ It is unlikely that the importers and distributors of these packaged brands would participate in a monetization program.

Seasonality and delivery issues

Fresh milk production can drop by as much as 30 percent during the dry season in Malawi (June to October), when dairy processors could augment reduced milk deliveries with powdered milk.

Degree of substitution among other commodities

As discussed earlier, imported milk powder (for direct wholesale/retail) already boasts strong distribution networks, convenient packs, and a market with many in rural areas. Some brands, such as Kerry Gold, are also being well promoted and, if world powder prices continue to fall, will become even more competitive.²⁹ It would be unlikely that these name brands would be substituted by Title II milk powder.

Fresh liquid milk will always contend with milk powder as its main substitution threat. "[The] world price of milk powder, which is used by processors for reconstitution to meet shortfalls in liquid milk supply, began to increase very significantly in early 2006 from around US\$2,500 per metric ton to over US\$5,000 per metric ton by 2007. This made it very expensive for dairy processors to rely on milk powder for

²⁷ Based on a commercial market share of 2,000 MT per year.

²⁸ Market Survey, Dairy Processors Association, Jason Agar, Kadale Consultants, March 20, 2008

²⁹ Ibid

reconstitution compared to the cost of using locally supplied liquid milk. This considerably shifted the incentive in favor of buying local milk.”³⁰ Milk processors interviewed for this study indicated that when prices return to historical levels that they would be interested in purchasing milk powder for reconstituting.

Relation to other food aid imports or local purchases

Research did not find evidence that other food aid agencies (including USDA’s Food for Progress) were importing in 2008 nor had plans to import milk powder over the next five years. However, WFP had been importing dry skim milk for non-market, direct distribution feeding programs from 2003 to 2007 (Table 11).

Table 11: WFP Distribution of Dry Skim Milk in Malawi

Year	MT
2003	96.5
2004	192.4
2005	42.9
2006	43.8
2007	31.7
2008	0.0
Total	407.3

Source: WFP

6.3.6 STORAGE CAPACITY

There is adequate storage at the three largest dairy processing companies (space, cool, dry, clean), should it be monetized under the PL 480 program. Therefore, storage is not determined to be a disincentive to monetizing.

6.4 ALTERNATIVE COMMODITIES

Several commodities have been considered for monetization through PL 480 but have been eliminated as viable options for the 2009–2014 MYAP, at least in the short-term. Full assessments were not required as factors that determined ineligibility were obvious, or one overriding factor was more than sufficient to make a determination.

6.4.1 SOYBEANS

Soybean importation and monetization was eliminated from the eligibility list due to the controversy over GMOs and FFP’s own policy on commodities that they may not be used in the animal feed industry. "At this time, FFP is not considering proposals including monetization of commodities for the animal feed industry.”³¹

Attempts to clarify the Government of Malawi’s policy on GMO, as it pertains to the importation of a GMO product was inconclusive, as GMO policy was still under development at high levels. The former policy, as it appears in previous Bellmon assessments by CRS, indicates that “the GoM requires that all imported commodities be certified GMO-free, or be processed (i.e. milled in the case of cereals). This policy effectively prohibits the importation of ‘seedable’ commodities that may be GMOs, and may subsequently enter into agricultural production.”³² This would effectively make U.S.-supplied soybeans ineligible as a PL 480 commodity.

³⁰ Ibid

³¹ P.L. 480 TITLE II PROGRAM POLICIES AND PROPOSAL GUIDELINES; FISCAL YEAR 2009, page 43, lines 1722-1723.

³² Malawi FY08 Bellmon Analysis, July 20, 2007

Discussions at the Ministry of Agriculture, the Chitedze Research Station, National Research Council, and Bunda College of Agricultural, led to various interpretations on the Government's GMO policy. At the moment, Government officials follow the regulations posted in the gazette notification dated 19 October 2007.

Three points became clear from the various interviews. First, that GMO is a very sensitive subject, and the Government will move cautiously and deliberately towards a policy position. A 14-member National Bio-Safety Regulatory Committee (representing both the public and private sectors) commenced operations in 2008 to advise the Minister of Environment on all matters pertaining to GMO, with a mandate to recommend product clearance for research or other use.³³ Second, a biotechnology and biosafety policy will eventually be designed and approved that will detail how biotechnology can be safely adopted, and will provide guidelines on research protocol, seed handling and field trial procedures. Third, GMO maize has been imported in the past under the caveat that it be milled under supervision on arrival, but that was under an emergency famine situation in 2002 only and is an exception to, not part of, the standing GMO policy³⁴.

Aside from GOM and U.S. policy constraints on soybean, importation and monetization of soybean to be sold to the feed/oil industries would have a negative effect on the local soybean sector, which has doubled production since 2004 (Table 12). More telling is the severe drop in soybean imports as local production meets demand – no soybeans were imported in 2007, and only 480 MT were recorded in 2006. Price increases from \$0.21 cents per kilogram in 2006 to \$0.64 cents per kilogram (\$0.40 cents after inflation) in 2008 also illustrate the vibrancy of the market.

Table 12: Sorghum production 2004-2008

	2004	2005	2006	2007	2008
Hectares	63,459	68,419	70,644	74,131	74,569
MT	40,905	18,175	54,309	63,698	61,999

Source: National Statistics Office (NSO)

6.4.2 SORGHUM

Sorghum is not recommended as a PL 480 monetization commodity because Malawi is self-sufficient in the production of sorghum, which has seen production increase from 39,600 MT in 2006 to 62,000 MT in 2007.³⁵ Minimal imports, totaling 6 MT in 2007, illustrate that most demand is met through domestic production.

6.4.3 RICE

Rice is an agricultural success story for Malawi. In 2006, Malawi became a net exporter of rice for the first time, demonstrating the industry's growth not only in production

Table 13: Formal Rice Trade Rice (MT)

	2005	2006	2007
Imports	7,400	2,041	3,116
Exports	1,708	3,302	4,698

Source: COMTRADE

³³ One illustration of GOM views on GMO is the National Food Reserve Agency (NFRA) which specifies "white non-GMO" when launching maize tenders.

³⁴ Bio Safety Act (No.13 of 2002)

³⁵ GOM reported a 1% decline in sorghum product in 2008

but also its capacity to market (Table 13). Unfortunately, local buyers and processors of rice, concerned over export growth, pressured the GoM to declare an export ban on Malawi rice in 2008.

Although not a major food source, except by the urban population and those who reside in rice-producing areas, Malawi's high quality aromatic rice is perceived as a "prestige" food by the general population and is consumed during family and community events (weddings and holidays), with over 30 percent of rice consumption takes place during the Christmas holidays.

Export growth is not just formal trade. Informal trade data for 2007 (unrecorded, cross-border) in rice indicates that exports of 5,000 MT far exceeded imports of 500 MT, a first time reversal of a five-year trend of imports exceeding exports. Early data for 2008 indicates that this trend will continue.³⁶

6.4.4 CONCENTRATED FRUIT JUICE

About \$1 million of concentrated fruit juice is imported into Malawi every year (Table 14). An estimated 98 percent of all concentrates originate in other African countries located in SADC, including: South Africa, Zimbabwe, Tanzania, Swaziland and Zambia. Import displacement by PL 480 fruit concentrate would negatively affect the commercial importation from five neighbouring countries and would affect at least \$1 million in local African import contracts.

Table 14: Imports of Fruit Juice Concentrate (US\$)

Year	Value
2004	998,687
2005	1,081,044
2006	1,050,907
2007	946,755

Source: COMESA

³⁶ FEWSNET

6.5 INTERNATIONAL MONETIZATION

When competition in a commodity market is severely limited, monetization activities in that market run the risk of introducing or intensifying such market distortions and deficiencies. In so doing, the monetization activity would reinforce those factors that frustrate the development of an openly and fully competitive market, thereby contributing to either excessive profits or barriers to entry. By denying producers and consumers the opportunity to operate within a competitive market, the monetization activity over time could lead to reduced national economic efficiency and assign indeterminate costs to producers and consumers. Monetization in such a market would be contrary to the legal prescription of the U.S. agricultural legislation, which requires that monetization does not introduce local market or production disincentives.

International monetization (IM), or regional or third country monetization, can offer an alternative for cooperating sponsors who find themselves operating in a country with less than fully competitive domestic commodity markets.

IM provides cooperating sponsors with the option of selling into a market where there is sufficient competition among buyers for a commodity in order to increase the likelihood that bids will be at or near import parity. With sufficient competition, there is assurance that the monetization is not distorting the market and can result in higher revenue generations than if the monetization was conducted in a domestic market with limited or no competition. IM can result in generating greater revenue for food security activities and thereby increase the efficiencies of the FFP program. It also provides the CSs with a fallback position if a commodity that was initially recommended for monetization becomes unviable at a later date because of changing market or policy conditions.

Because of highly limited competition for likely commodities made available through Title II in the Malawi market for monetization, IM is a reasonable option.

FFP 2009 Guidelines

Monetization in the recipient country is preferred over monetization in a “third” country, a country where the food security activities will not be take place. If it is not feasible to monetize in the country where proceeds will be utilized, monetization may be carried out in another LIFDC in the region, i.e. “third country”. A list of low-income food-deficit countries (LIFDCs) can be found on FAO’s web site at <http://www.fao.org/countryprofiles/lifdc.asp?lang=en>. If the LIFDC option is not feasible, then monetization may take place in a U.N. classified, least-developed country (LDC) in the region at <http://www.un.org/special-rep/ohrrls/ldc/list.htm>. In the case of “third country” sales, the USAID Mission and/or U.S. Embassy in both the program country and the monetization country must endorse the plan.’

The appropriate third country or regional market is that market in which it is reasonable to expect to receive a price reflective of the international price. As the final destination of the commodities sold is indeterminate, the relevant reference to ensure that the Bellmon “market” conditions are satisfied is that the final negotiated price is comparable to the import price for that market. In addition, the port facilities of the selected market platform need to be sufficient to physically accommodate the commodities.

Monetization in a relatively large port city is preferred as inland freight and other costs can be assumed by the buyer. The preferred currency in which the transaction would be conducted would be specified in the offer

Based on the above criteria, the following products and markets can be considered for IM:

Table 15: Potential Products and Markets for International Monetization

	Mombasa, Kenya		Mozambique Ports		Dar Es Salaam, Tanzania	
	MT	\$000s	MT	\$000s	MT	\$000s
Total Annual Import Market*	1,725,952	607,396	743,080	318,324	1,034,552	335,272
Wheat	844,558	198,126	280,425	63,569	623,732	139,393
Rice	314,899	81,604	258,645	117,527	62,501	12,995
Vegetable Oil**	564,531	323,398	180,119	96,849	347,070	182,068
Milk Powder	1,964	4,268	23,890	40,379	1,249	817
LIFDC	✓		✓		✓	
Port City	✓		✓		✓	
No FE Restrictions	✓		✓		✓	
Adequate Port Facilities	✓		✓		✓	
No Significant Security Issues			✓		✓	

Source: UN Comtrade

*Excluding U.S. sourced food aid

**Average 91 percent palm oil

If IM is selected as an option, a widely advertised competitive procurement using newspapers, the Internet and radio is recommended. Advertisement should be explicit regarding commodity specifications, delivery time range and transaction location, payment terms and required currency. An auction process using a commodity exchange should be considered. Finally, both the Mission Director of the IM country and the MYAP country must approve the use of this procedure.

7.0 ANALYSIS AND RECOMMENDATIONS

7.1 ANALYSIS OF FOOD AID PROGRAM ISSUES

Total emergency and non-emergency food aid volumes donated by USAID, USDA, the European Union – implemented primarily by I-LIFE (CRS), Planet Aid (Food for Progress), and WFP – fell sharply from over 141,000 MT in 2005, to less than 90,000 MT in 2007. Non-emergency food aid is supplied primarily by the U.S. (48 percent) and by the EU through WFP (41 percent). Monetized food aid accounts for one-third of all non-emergency aid. It has increased 600 percent from US\$1.7 million in 2005, to US\$11.9 million in 2008, with CDSO comprising 30 percent of monetized commodities and wheat grain 70 percent.

Maize has been the most important commodity, both for emergency and non-emergency programs. However, according to the Malawi Vulnerability Assessment Committee June 2007 Brief, the 2007/2008 harvest projections, as well as the broader food security outlook, are predicting continued improvement in maize production, with upwards of 1 million MT expected to be available for Malawi grain reserves and exports. If this is the case, then local procurement of maize for food aid will become an option.

7.1.1 PRODUCT SPECIFIC ANALYSIS FOR MONETIZATION

Wheat

Domestic demand for wheat for the upcoming MYAP is very conservatively estimated at 80,000 MT, although the two major private mills report demand will be between 170,000 to 200,000 MT/year. Malawi's production meets less than three percent of its demand, leaving a large supply deficit. This deficit has been, and will continue to be, met by commercial imports, which are sourced primarily from Argentina and Australia. The United States exported 10,000 MT/year of HRWW to Malawi from 2006 to 2008 (USDA monetized by Planet Aid), and an additional 9,140 MT of USAID HRWW in 2008 to I-LIFE, with CRS managing the monetization. Using government import statistics as a base, monetized HRWW has averaged 12 percent per year of total demand since 2005.

There is demand for HRWW between two national firms and it is recommended as part of the mix for monetization under the upcoming MYAP. Assuming that the revenue goals were entirely satisfied by wheat, 25,000 MT would be required (IPP of US\$400/MT) to meet estimate program needs of US\$10 million, or 31 percent of annual demand. Combined with projected USDA HRWW monetization of \$5 million, and continued decline of wheat prices on international markets, monetized food aid from both sources could approach 50 percent of estimated annual consumption.

Vegetable Oil

Domestic demand for vegetable oils is projected at 38,000 MTs (2008), consisting primarily of oils produced from soybeans. Vegetable oil production in Malawi is driven in large part by a growing animal

feed industry, which uses soybean meal for feed and vegetable oil as a by-product. Some sunflower oil is also produced. Due to GMO restrictions, U.S. raw soybeans cannot be imported without extensive GoM reviews and assurances that they will not be used as seed stock. Malawi produces an estimated 20 percent of its annual requirements, with the balance supplied by commercial imports from Argentina for crude oil, and Italy for refined.

The estimated difference in monetized prices to IPP has ranged from 76 percent to 93 percent for the last five calls forward. There is competition in the vegetable oil refining business between two large firms, Unilever and Capital Oil Refineries, and Oil and Protein, which imports smaller volumes of crude vegetable oils. Although Capital has not participated in the past due to its contract dispute with the MMU, it has indicated that it will resume bidding on future monetization tenders, while two additional firms have plans for building refineries. With substantial demand for imports, expanding local refining capacity, and adequate competition, CDSO is recommended for monetization.

Milk Powder

With the exception of 2007 when milk powder prices more than doubled, the processing industry and local wholesale/retail markets require approximately 2,000 MT per year of imported milk powder. Analysis indicates that half of this total is used by the processing industry to reconstitute into milk and high-end milk products such as ice cream, yogurts and cheese. Two of the largest processing plants are working at or less than half capacity due to raw material shortages. Since current IPP has declined to where the industry should be interested in monetization tender, whole fat powdered milk is recommended as an option for meeting a part of the MYAP funding needs.

Any monetization of milk powder would need to comply with the International Code of Marketing of Breastmilk Substitutes and all subsequent relevant World Health Assembly (WHA) resolutions pertinent to the sale or distribution of breastmilk substitutes. Milk powder may be sold for industrial use as an ingredient in processed foods, baked goods, yogurt, etc. Milk powder cannot substitute for breastmilk or be used for products represented or locally perceived as breastmilk substitutes. It cannot be sold for direct market distribution, for example, in small tender sales, and cannot be sold directly to consumers. In addition, milk powder cannot be sold to known manufacturers or marketers of breastmilk substitutes or replacement foods with breastmilk substitute production facilities.

7.2 ANALYSIS OF STORAGE AND DISTRIBUTION ISSUES

Malawi has substantial storage capacity, estimated at 484,400 MT in a number facilities (2,500 for vegetable oil, and the balance for grain) that are primarily the government-owned ADMARC (457,900 MT nationwide), with the balance owned or managed by CRS, BGM, Capital Oil and Capital Foods. Monetization takes place at ports in Mozambique: port facilities in Beira and Nacala have combined capacity for 125,000 MT of grain and nearly 4,500 MT of vegetable oil.

All imports of PL 480 commodities into Malawi arrive via the ports of Nacala and Beira in Mozambique, 800 and 900 kilometers from Blantyre, respectively. The main points of entry into Malawi from Mozambique are Nayuchi (from Nacala by rail for vegetable oil shipping) and Mwanza (from Beira by road for grains). The road from Mwanza to Blantyre and Lilongwe is the main transport route and is paved and passable throughout the year.

Based on this assessment and past performance, available storage and transport infrastructure is sufficient to support the upcoming MYAP program.

7.3 ANALYSIS OF KEY POLICY ISSUES

As a member of COMESA and SADC, tariffs and other trade barriers with other member countries have been, or are being, removed. This should result in increased trade flows of surplus commodities between countries, including adjustment of national commodity prices to be more in line with international prices.

Malawi's Target Input Program (TIP), introduced in 2006 to boost crop production in response to low agricultural harvests, has been replaced by a new and significantly more aggressive input subsidy program. As a result, in 2007 Malawi became a net exporter of maize to nearby countries. The fertilizer subsidy for the 2006/07 season cost US\$74 million, and yielded US\$120 million in additional production, mostly maize. The program was continued for the 2007/08 growing season, but at a considerably higher cost (estimated as high as \$200 million) due to the steep rise in fertilizer prices.

In an attempt to cope with high maize prices in mid-2008, the government imposed a ban on private, large-scale trading of maize. The immediate result was a nationwide fall in prices, although MoAFS data shows more than half of surveyed markets continue to function outside the poorly-enforced policy. The net effect of this policy in the near term is a disincentive to the free flow of surplus commodities. In the medium term, it sets the precedent of government intervention when prices for producers and investors promise greater than average returns, potentially dampening interest of additional private investment in the sector.

Malawi officially requires certification that imported commodities are either GMO-free or utilized exclusively for processing (i.e. milled in the case of cereals). The policy has been subject to criticism due to a lack of clarity on commodity qualifications. Of the potential commodities available for monetization, GMO soybeans and maize would be subject to this restriction. Neither is being considered for monetization.

ANNEX I: COUNTRY BACKGROUND AND OVERVIEW

Demographic and Geographic Information

- Malawi is a landlocked country in southeastern Africa with a population of about 13,932,000, and an annual population growth rate of 2.39 percent.
- Malawi ranks 174 out of 177 countries in the most recent (2005) UN Human Development Index. Life expectancy is 46.3 years and GDP per capita is US\$667.³⁷
- The country has three administrative regions (Northern, Central, and Southern) divided into 28 districts.
- Its land area is 118,480 square kilometers, of which 20 percent is water (Lake Malawi). Much of the land surface is plateau between 900 to 1,220 m (3,000 to 4,000 ft) above sea level.

Economic Overview

- Exports: US\$604 million per year (2007) of tobacco (53 percent of total), tea, sugar, cotton, coffee, peanuts, wood products, and apparel; major export destinations include South Africa, Germany, Egypt, Zimbabwe, the U.S., Russia and the Netherlands.
- Imports: US\$866 million per year of food, petroleum products, semi manufacturers, consumer goods, and transportation equipment is imported from South Africa, India, Zambia, Tanzania, the U.S. and China.
- Substantial economic assistance received from the IMF, the World Bank, and bilateral donors. In 2006, Malawi was approved for relief under the Heavily Indebted Poor Countries (HIPC) program.³⁸

Agricultural Sector Overview

- The agricultural sector contributes about 36 percent of Malawi's Gross Domestic Product, and provides livelihoods for more than 85 percent of the population. The crop sub-sector supplies more than 65 percent of the manufacturing sector's raw materials, 64 percent of total rural income, and 90 percent of Malawi's foreign exchange earnings.³⁹
- Thirty thousand estates, ranging in size from 10 to 500 hectares each, comprise one million hectares of land and 1.7 million smallholders farm an average of one hectare each.⁴⁰ Smallholder average farm sizes vary by region: Southern (as little as 0.2 hectares), Northern (8-12 hectares), and Central (3.5-9 hectares).

³⁷ UNDP Human Development Reports: http://hdrstats.undp.org/countries/country_fact_sheets/cty_fs_MWI.html

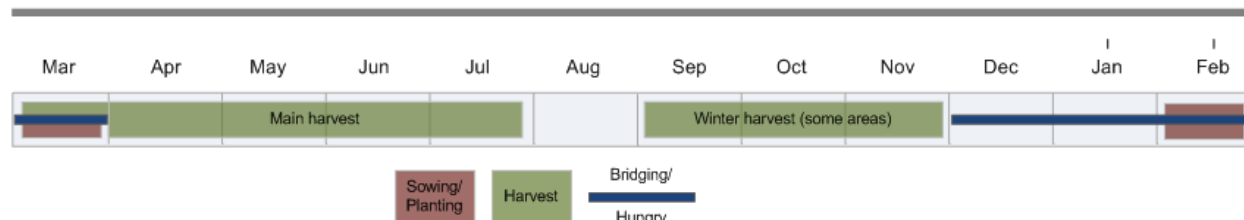
³⁸ CIA Factbook: <https://www.cia.gov/library/publications/the-world-factbook/geos/mi.html>

³⁹ Strategic Plan to Improve Crop Production, 2006/07 – 2011/12, MOAFS

⁴⁰ Some studies have stated that average smallholder farm size may be as small as 0.5 ha.

- Malawi has one production season from October to March, annual rainfall from 700 milliliters (Central Plateau and Lakeshore Plain) to 3,300 milliliters (Northeast), with production dominated by maize. Root crops (cassava and sweet potato), beans and other pulses, and rice are also important. Tobacco is the largest cash crop accounting for more than 50 percent of export earnings, followed by tea, sugar, cotton, coffee, tree nuts, and groundnuts.

Seasonal calendar and critical events (all rainfed crops)



- In 2006, Malawi began a new program of fertilizer/seed subsidies to smallholders and, as a result, became a net exporter of maize in 2007. The program (at a cost of \$74 million) resulted in production of about \$120 million in maize, with estimated national harvest volumes of 3.2 million MT (demand estimate 2.4 million MT).

Production Volumes of Key Commodities in Malawi (MT)

	2004	2008	% Change
Cassava	2,532,079	3,539,660	40%
Maize	1,608,349	2,777,438	73%
Sweet Potatoes	1,762,034	2,362,425	34%
Irish Potatoes	420,590	673,344	60%
Pulses	242,364	396,868	64%
Groundnuts	153,414	260,573	70%
Rice	49,693	114,905	131%

Source: Ministry of Agriculture, Irrigation and Food Security

- The 2007/08 season projected to be a maize surplus year, although estimates of harvest range from 2.0 to 2.8 million MT⁴¹. Despite the surplus, prices rose from \$0.21/kg to \$0.53/kg before the Government intervened in September 2008 to control prices over concerns of speculation and inflation.
- ADMARC, the national parastatal marketing agency, was designated the sole procurement agency for maize, and set the market price at \$0.32/kg for buying and \$0.37/kg for selling in mid-2008. As of the time of this study, ADMARC had procured stocks of 50,000 - 70,000 MT and the Malawi Strategic Grain Reserve (SGR)⁴² had been fully stocked with 60,000 MT, more than sufficient to meet the needs of the estimated 1.5 million people who are food insecure (56,000 MT in food) – an average about 26.4 kg per person..⁴³

Overview of Normal Dietary Requirements for Households

The Malawi Vulnerability Assessment Committee uses 2,100 kilocalories as the measure of minimum daily calorie intake. The Malawi diet is made up of various portions of several food groups but maize is the predominate staple in the Malawi diet (see Table 2) from which they receive 65 percent of the per

⁴¹ Again, experts disagree over annual requirements; some put 1.8-2.0 million MT as a more accurate estimate, others 2.2 -2.4 million MT. Official harvest volume as of June 2008 was 2.9 million MT, 9% below 2007 harvest volumes of 3.2 million MT.

⁴² SGR is supported mostly through EU funding

⁴³ Vulnerability Assessment Committee Bulletin (June 2008)

capita daily calorie intake. Cassava and sweet potatoes are gradually becoming more prominent in the diet.

Malawi's Main food groups

Cereals	Mostly maize, but may include millet, sorghum, rice and wheat flour products
Root crops	Mostly cassava and sweet potato
Legumes and pulses	Beans, chick peas, pigeon peas, groundnuts
Dairy and Livestock	Considered expensive and not readily available to the rural poor
Edible oils	Expensive and used in very small quantities

Source: Malawi Vulnerability Assessment Committee (MVAC)

According to the Malawi Vulnerability Assessment Committee (VAC) Bulletin June 2008, prepared just after 2007/08 harvest results were known (but not officially released), and based on a May 2008 vulnerability assessment, there were 1.5 million food insecure people in Malawi – compared to 4.2 million in 2005. Despite the 2007/08 maize surplus, due mostly to favorable rains and fertilizer subsidies, there were areas that experienced localized droughts and flash flooding. In addition, several thousand children and adults falling into food insecure categories include HIV/AIDS, OVC, malnourished children, the elderly, and the poor.⁴⁴

⁴⁴ FAO puts Malawi's poor at more than half the population with 22% classified as ultra-poor

ANNEX II: WHEAT STATISTICS

Domestic Wheat Production

	2003		2004		2005		2006		2007		Average	
	Ha	MTs	Ha	MTs	Ha	MTs	Ha	MTs	Ha	MTs	Ha	MTs
Blantyre	2,500	1,313	1,700	1,360	1,850	1,628	1,521	1,901	1,850	4,477	1,884	2,136
Karonga	-	-	127	132	112	-	109	-	125	-	95	26
Lilongwe	132	125	220	115	-	94	-	92	-	113	70	108
Mzuzu	47	49	22	47	22	2	25	1	30	-	29	20
Kasungu	22	15	44	14	3	6	1	6	-	15	14	11
Total	2,701	1,502	2,113	1,668	1,987	1,730	1,656	2,000	2,005	4,605	2,092	2,301

Source: Ministry of Agriculture, Irrigation and Food Security

Malawi Commercial Wheat Imports

	2004		2005		2006		2007	
	MT	\$000s	MT	\$000s	MT	\$000s	MT	\$000s
Mozambique	-	-	5,930	2,110	152,706	21,960	25,118	10,371
Argentina	7,500	2,096	2,200	757	-	-	19,504	7,348
UAE	5,000	1,633	14,707	5,791	5,669	3,608	15,147	6,779
USA	6,900	2,377	1	0	5,500	2,084	9,997	3,237
Ukraine	-	-	-	-	-	-	9,103	2,837
Tanzania	11,472	3,104	-	-	1,000	351	6	1
Others	1,435	404	16,431	5,059	3,859	3,847	-	-
Total	32,307	9,615	39,269	13,717	168,734	31,850	78,875	30,572

Source: COMESA

100110: Durum wheat

100190: Wheat and meslin (excl. durum wheat)

Malawi Commercial Wheat Flour Imports

	2004		2005		2006		2007	
	MT	\$000s	MT	\$000s	MT	\$000s	MT	\$000s
Turkey	3,772	994	9,674	3,156	8,085	3,040	1,843	1,147
Mozambique	10,611	3,880	8,993	3,550	931	408	750	314
UAE	5,151	1,784	529	243	824	407	199	1,840
Tokelau	-	-	-	-	66	23	134	144
Malaysia	-	-	-	-	-	-	43	20
South Africa	2,984	1,193	3,550	1,546	1,254	592	7	96
Tanzania	902	232	1,065	260	697	179	-	0
United Kingdom	419	235	1,988	630	842	426	-	-
India	7,445	1,894	3,244	907	349	115	-	-
Others	711	248	236	101	33	106	-	-
Total	31,996	10,462	29,280	10,391	13,082	5,295	2,977	3,561

Source: National Statistics Office (NSO)

11010000: Wheat or Meslin Flour

Malawi Consumption of Wheat

		2003	2004	2005	2006	2007	Average
01	Domestic Production	1,502	1,668	1,730	2,000	4,605	2,301
02	Imports	87,751	74,968	78,308	186,177	82,844	102,010
03	Commercial – Wheat	37,663	32,307	39,269	158,734	68,875	67,370
04	Commercial - Wheat Flour	50,088	42,661	39,040	17,443	3,969	30,640
05	Concessional	-	-	-	10,000	10,000	4,000
06	Distributed	-	-	-	-	-	-
07	Monetized	-	-	-	10,000	10,000	4,000
08	Exports	-	1,783	160	9,235	5,986	3,433
09	Commercial – Wheat	-	1,738	-	3,400	5,786	2,185
10	Commercial - Wheat Flour	-	45	160	5,835	200	1,248
11	Local Procurement	-	-	-	-	-	-
12	Apparent Disappearance	89,253	74,853	79,878	178,942	81,463	100,878
13	Producer Price (US\$/MT)	224	271	277	291	305	273
14	Wholesale Market Price (Wheat Flour (US\$/50 kg est)	n/a	n/a	n/a	24	36	30
15	Retail Prices (US\$/MT)	n/a	n/a	n/a	n/a	n/a	n/a
16	Monetized Price	n/a	n/a	n/a	250	320	
17	IPP (annual average) US\$/MT	n/a	n/a	294	338	463	
18	FOB – Argentina	n/a	n/a	159	200	269	
19	International Transport/Handling	n/a	n/a	75	73	119	
20	Customs Duty*	0%	0%	0%	0%	0%	
21	Inland Transport	n/a	n/a	60	65	75	
22	% IPP	n/a	n/a	n/a	74%	69%	

N/A: Not Available

01 Ministry of Agriculture, Irrigation & Food Security

02 Commercial (03,04) + Concessional (05) Imports

03 COMESA, UN Comtrade

100110: Durum wheat

100190: Wheat and meslin (excl. durum wheat)

04 National Statistics Office (NSO)

Note: Wheat flour converted to wheat equivalent using factor of 1 MT wheat = 0.75 MT wheat flour

05 Distributed (06) + Monetized (07) Imports

06 N/A: Wheat has not previously been distributed as food aid

07 Cooperating Sponsors (Planet Aid)

08 Commercial Exports (09,10) + Local Procurement for Export (11)

09 National Statistics Office (NSO)

10 National Statistics Office (NSO)

Note: Wheat flour converted to wheat equivalent using factor of 1 MT wheat = 0.75 MT wheat flour

11 N/A: There is no local procurement of wheat in Malawi

12 Domestic Production (1) + Imports (2) - Exports (8)

13 FAO Estimate

14 N/A: Wheat is not sold on in wholesale markets

15 N/A: Wheat is not sold on in retail markets

- 16 Cooperating Sponsors (Planet Aid), Sales reflect USDA program monetizations. USAID monetization (CRS) did not occur until 2008 - see detail in following table.
- 17 Calculation of (FOB Value + International Transport) x (1 + Customs Duty) + Internal Transport
- 18 Bolsa de Cereales, Argentina, Price adjusted for difference in quality to US HRWW
- 19 International Grains Council (IGC)/Fearnleys research, Calculation based on TC and fuel rates
- 20 Malawi Revenue Authority (MRA)
- *Note: There are no customs duties imposed on the importation of wheat as it is a raw commodity used for processing
- 21 Local Freight Forwarder Estimate
- 22 Percentage of Monetized Price (16) compared to IPP (17)

Detailed Wheat IPP Calculation

Month	FOB – ARG	Quality Adjust*	FOB Adjust	INS	Freight	Handling	Estimated IPP	IPP Moving Avg	Sale Price	% IPP
Feb-05	115.75	33%	153.75	0.46	65.73	15.00	234.94	238.41		
Mar-05	127.50	24%	157.50	0.47	71.16	15.00	244.13	236.64		
Apr-05	129.40	14%	147.80	0.44	76.35	15.00	239.59	233.66		
May-05	133.25	12%	149.25	0.45	70.27	15.00	234.97	231.99		
Jun-05	132.75	13%	150.00	0.45	64.11	15.00	229.56	232.29		
Jul-05	143.40	4%	148.60	0.45	54.73	15.00	218.77	232.28		
Aug-05	141.75	11%	158.00	0.47	48.49	15.00	221.96	231.62		
Sep-05	136.40	24%	169.20	0.51	52.31	15.00	237.01	231.14		
Oct-05	135.75	28%	174.00	0.52	54.57	15.00	244.09	231.78		
Nov-05	135.67	24%	168.33	0.51	51.16	15.00	234.99	235.59		
Dec-05	130.20	29%	168.00	0.50	48.08	15.00	231.58	239.08		
Jan-06	132.75	29%	170.75	0.51	47.80	15.00	234.06	240.91		
Feb-06	137.25	34%	184.50	0.55	45.38	15.00	245.43	244.57		
Mar-06	135.00	35%	182.40	0.55	48.45	15.00	246.40	250.39		
Apr-06	136.25	36%	185.50	0.56	48.77	15.00	249.82	257.85		
May-06	145.75	39%	202.75	0.61	51.31	15.00	269.67	264.27		
Jun-06	156.00	31%	204.80	0.61	55.33	15.00	275.74	270.59		
Jul-06	158.50	32%	209.75	0.63	58.43	15.00	283.81	278.66		
Aug-06	161.25	25%	201.00	0.60	62.42	15.00	279.02	285.62		
Sep-06	168.80	23%	208.00	0.62	66.03	15.00	289.66	289.78		
Oct-06	191.50	15%	220.25	0.66	66.96	15.00	302.87	292.04		
Nov-06	186.00	16%	216.33	0.65	66.57	15.00	298.55	293.50		
Dec-06	186.40	16%	216.40	0.65	66.75	15.00	298.80	296.57		
Jan-07	180.25	15%	207.75	0.62	68.17	15.00	291.54	299.21		
Feb-07	174.75	20%	210.00	0.63	68.45	15.00	294.08	300.81		
Mar-07	188.00	11%	208.40	0.63	76.49	15.00	300.52	306.72		
Apr-07	210.50	0%	211.25	0.63	81.21	15.00	308.09	316.52		
May-07	218.50	-7%	202.50	0.61	95.96	15.00	314.07	332.44		
Jun-07	240.40	-4%	231.80	0.70	92.43	15.00	339.93	359.71		
Jul-07	255.00	0%	253.75	0.76	97.94	15.00	367.45	389.13		

Detailed Wheat IPP Calculation

Month	FOB – ARG	Quality Adjust*	FOB Adjust	INS	Freight	Handling	Estimated IPP	IPP Moving Avg	Sale Price	% IPP
Aug-07	275.40	1%	278.20	0.83	108.91	15.00	402.95	416.56		
Sep-07	326.75	7%	350.50	1.05	118.43	15.00	484.98	449.15		
Oct-07	323.25	9%	353.00	1.06	137.39	15.00	506.45	476.86		
Nov-07	290.40	16%	337.60	1.01	146.47	15.00	500.09	507.60		
Dec-07	317.00	21%	383.50	1.15	142.54	15.00	542.19	535.45		
Jan-08	331.25	16%	385.50	1.16	132.25	15.00	533.91	542.51		
Feb-08	367.00	22%	446.00	1.34	120.32	15.00	582.66	542.76		
Mar-08	347.00	31%	453.75	1.36	127.78	15.00	597.90	548.97		
Apr-08	372.00	4%	387.50	1.16	130.69	15.00	534.36	544.35		
May-08	353.00	-2%	346.40	1.04	145.77	15.00	508.21	538.41	390.00	72%
Jun-08	362.75	2%	368.75	1.11	158.72	15.00	543.58	517.70		
Jul-08	329.25	5%	346.25	1.04	147.52	15.00	509.81	504.33		
Aug-08	306.60	12%	342.60	1.03	133.72	15.00	492.35	498.32		
Sep-08	280.00	11%	309.75	0.93	112.00	15.00	437.68	495.85		

*FOB - Argentina prices adjusted for quality differences between Argentine (Trigo Pan) and US HRW wheat based on the conversion factor in column 3 of the above table.

ANNEX III: OILSEED/CDSO STATISTICS

Domestic Oilseed Production

	2004		2005		2006		2007		2008		Average	
	HA	MT	HA	MT	HA	MT	HA	MT	HA	MT	HA	MT
Soybean	49,714	36,105	68,524	40,396	71,652	55,248	79,465	71,295	73,942	64,489	68,659	53,507
Cotton	63,447	53,581	88,535	50,363	62,233	58,569	60,673	63,290	69,826	76,761	68,943	60,513
Sunflower	6,600	3,660	7,429	2,672	7,651	5,450	7,507	5,910	7,575	5,745	7,352	4,687
Total	119,761	93,346	164,488	93,431	141,536	119,267	147,645	140,495	151,343	146,995	144,955	118,707

Source: Ministry of Agriculture, Irrigation and Food Security

Imports of Crude and Refined Edible Oils

	2003		2004		2005		2006		2007		Average	
	MT	\$000s	MT	\$000s	MT	\$000s	MT	\$000s	MT	\$000s	MT	\$000s
Soybean	13,634	10,073	15,256	12,693	21,048	15,668	17,913	15,238	15,199	16,846	16,610	14,104
Palm	1,840	1,104	5,889	3,602	6,975	4,555	3,809	5,670	7,370	6,882	5,177	4,363
Sunflower	1,510	1,218	460	374	367	346	334	286	183	310	571	507
Cottonseed	490	303	12	3	243	172	247	200	0	1	198	136
Total	17,474	12,698	21,618	16,673	28,633	20,740	22,303	21,395	22,753	24,038	22,556	19,109

Source: National Statistics Office (NSO), COMTRADE

15071000: Crude Soya-Bean Oil

15079000: Soya-Bean Oil (Excl. Crude) and Fractions

15111000: Palm Oil, Crude

15119000: Palm Oil, Other than Crude

15121100: Crude Sunflower-Seed and Safflower Oil

15121900: Sunflower-Seed and Safflower Oil (Excl. Crude) and Fractions thereof

15122100: Crude Cotton-Seed Oil, Whether or not Gossypol has been Removed

15122900: Cotton-Seed Oil(Excl. Crude)& Its Fractions, Refined/Not, Not Chemically Modified

Monthly FOB Prices for Argentine CDSO (US\$/MT)

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
2006	425	453	477	460	488	471	494	509	517	527	631	665	510
2007	631	611	604	655	692	748	776	809	842	885	1,004	1,030	774
2008	1,162	1,326	1,355	1,315	1,310	1,369	1,320	1,100	981				1,249

Source: Bolsa de Cereales

Edible Oil Consumption

		2003	2004	2005	2006	2007	Average
01	Domestic Production	8,220	8,220	8,220	8,220	8,220	8,220
02	Imports	17,474	23,906	30,414	28,221	24,940	24,991
03	Commercial – Crude	9,713	16,900	21,892	15,750	18,796	16,610
04	Commercial – Refined	4,941	1,668	3,651	3,583	1,047	2,978
05	Concessional	2,820	5,338	4,871	8,888	5,098	5,403
06	Distributed – USAID	-	-	256	349	365	194
07	Distributed – WFP	-	2,288	1,526	5,569	1,822	2,241
08	Monetized	2,820	3,050	3,090	2,970	2,910	2,968
09	Exports	24	362	29	3	2,150	514
10	Commercial – Crude	-	36	2	3	-	8
11	Commercial – Refined	24	326	27	-	2,150	505
12	Local Procurement	-	-	-	-	-	-
13	Apparent Disappearance	25,670	31,763	38,605	36,438	31,010	32,697
14	Producer Price (US\$/MT)	-	-	-	-	-	-
15	Wholesale Market Price (US\$/MT)	-	-	-	-	-	-
16	Retail Prices (US\$/MT)	-	-	-	-	-	-
17	Monetized Price	n/a	n/a	538	547	651	
18	IPP (annual average) US\$/MT	512	541	532	583	894	
19	FOB Price – Argentina	512	541	456	510	774	
20	International transport	n/a	n/a	76	74	120	
21	Customs Duty*	10%	10%	10%	10%	10%	
22	Inland Transport	n/a	n/a	n/a	n/a	n/a	
23	% IPP	n/a	n/a	101%	94%	73%	

N/A: Not Available

01 CAPS, Pryoto Feed

Note: Above feed companies crush oilseeds producing crude edible oil as a byproduct

02 Commercial (03,04) + Concessional (05) Imports

15071000: CRUDE SOYA-BEAN OIL

15079000: SOYA-BEAN OIL (EXCL. CRUDE) AND FRACTIONS

15111000: PALM OIL, CRUDE

15119000: PALM OIL, OTHER THAN CRUDE

15121100: CRUDE SUNFLOWER-SEED AND SAFFLOWER OIL

15121900: SUNFLOWER-SEED AND SAFFLOWER OIL (EXCL. CRUDE) AND FRACTIONS THEREOF

15122100: CRUDE COTTON-SEED OIL, WHETHER OR NOT GOSSYPOL HAS BEEN REMOVED

15122900: COTTON-SEED OIL (EXCL. CRUDE) & ITS FRACTNS, REFINED/NOT, NOT CHEMICALLY MODIFD

03 UN Comtrade

04 UN Comtrade

05 Distributed (06,07) + Monetized (08) Food Aid Imports

06 Cooperating Sponsors

07 Cooperating Sponsors

08 Cooperating Sponsors

09 Commercial Exports (10,11) + Local Procurement for Export (12)

10 UN Comtrade

- 11 UN Comtrade
 12 N/A, CDSO has not been procured locally for Export
 13 Domestic Production (1) + Imports (2) - Exports (9)
 14 N/A
 15 N/A
 16 N/A
 17 Cooperating Sponsors
 18 Calculation of (FOB Value + International Transport) x (1 + Customs Duty) + Internal Transport
 19 Bolsa de Cereales, Argentina
 Note: Prices averaged over the same periods where monetization took place
 20 Fearnresearch, Calculation based on TC and fuel rates
 21 Malawi Revenue Authority (MRA)
 Note: Historically CDSO has been monetized at port and is therefore not subject to customs duties at time of sale
 22 Historically CDSO has been monetized at port and therefore has not incurred inland transportation costs
 23 Comparison of annual average monetization price (16) with annual average IPP (17)

Detailed CDSO IPP Calculation

Month	FOB - ARG	INS	Freight	Handling	Estimated IPP	IPP Moving Avg.	Sale Price	% IPP
Feb-05	427.45	1.28	65.73	15.00	494.47	537.91		
Mar-05	482.18	1.45	71.16	15.00	554.79	534.33		
Apr-05	487.36	1.46	76.35	15.00	565.17	530.79		
May-05	465.56	1.40	70.27	15.00	537.23	526.46		
Jun-05	454.52	1.36	64.11	15.00	519.99	528.25	530.00	100%
Jul-05	457.00	1.37	54.73	15.00	513.10	522.34		
Aug-05	450.64	1.35	48.49	15.00	500.48	512.26		
Sep-05	453.35	1.36	52.31	15.00	507.01	504.87		
Oct-05	457.43	1.37	54.57	15.00	513.37	498.28		
Nov-05	442.13	1.33	51.16	15.00	494.61	496.44		
Dec-05	436.13	1.31	48.08	15.00	485.51	500.26		
Jan-06	424.80	1.27	47.80	15.00	473.88	500.66		
Feb-06	453.46	1.36	45.38	15.00	500.19	504.52	530.00	105%
Mar-06	477.38	1.43	48.45	15.00	527.27	509.19		
Apr-06	459.66	1.38	48.77	15.00	509.80	518.96		
May-06	487.62	1.46	51.31	15.00	540.40	533.09		
Jun-06	470.52	1.41	55.33	15.00	527.26	545.21		
Jul-06	494.00	1.48	58.43	15.00	553.91	555.00		
Aug-06	508.86	1.53	62.42	15.00	572.81	582.05		
Sep-06	517.44	1.55	66.03	15.00	585.03	609.74		
Oct-06	527.24	1.58	66.96	15.00	595.78	634.62		
Nov-06	630.73	1.89	66.57	15.00	699.18	652.83		
Dec-06	665.42	2.00	66.75	15.00	734.17	668.49		
Jan-07	631.41	1.89	68.17	15.00	701.47	690.32	575.00	83.3%
Feb-07	611.05	1.83	68.45	15.00	681.33	718.10		

Detailed CDSO IPP Calculation

Month	FOB - ARG	INS	Freight	Handling	Estimated IPP	IPP Moving Avg.	Sale Price	% IPP
Mar-07	604.14	1.81	76.49	15.00	682.44	738.53		
Apr-07	654.72	1.96	81.21	15.00	737.89	758.81	697.00	91.9%
May-07	692.19	2.08	95.96	15.00	790.23	790.12		
Jun-07	747.50	2.24	92.43	15.00	842.17	830.40		
Jul-07	775.88	2.33	97.94	15.00	876.14	879.27		
Aug-07	809.32	2.43	108.91	15.00	920.66	938.64		
Sep-07	842.32	2.53	118.43	15.00	963.27	993.71		
Oct-07	884.50	2.65	137.39	15.00	1024.54	1058.77		
Nov-07	1003.95	3.01	146.47	15.00	1153.44	1140.79		
Dec-07	1030.11	3.09	142.54	15.00	1175.74	1221.67	932.50	76.3%
Jan-08	1161.86	3.49	132.25	15.00	1297.60	1291.14		
Feb-08	1325.95	3.98	120.32	15.00	1450.25	1353.37		
Mar-08	1355.00	4.07	127.78	15.00	1486.85	1407.40		
Apr-08	1314.90	3.94	130.69	15.00	1449.54	1449.65		
May-08	1310.43	3.93	145.77	15.00	1460.13	1440.96		
Jun-08	1368.85	4.11	158.72	15.00	1531.68	1390.33	1,290.00	92.8%
Jul-08	1320.05	3.96	147.52	15.00	1471.52	1374.24		
Aug-08	1099.75	3.30	133.72	15.00	1236.77	1359.18		
Sep-08	980.86	2.94	112.00	15.00	1095.80	1333.94		

ANNEX IV: MILK POWDER STATISTICS

Malawi Commercial Milk Powder Imports

	2003		2004		2005		2006		2007		Average	
	MT	\$000s	MT	\$000s	MT	\$000s	MT	\$000s	MT	\$000s	MT	\$000s
Ireland	90	167	345	719	814	1,864	1,187	2,992	655	3,295	618	1,807
Denmark	47	106	0	0	33	77	260	584	201	480	108	250
Brazil	45	94	-	-	-	-	79	176	159	490	57	152
Argentina	48	122	10	8	-	-	50	133	101	261	42	105
S. Africa	419	1,264	826	1,592	628	1,941	479	1,267	51	854	481	1,384
Zimbabwe	65	120	197	419	130	127	74	135	38	145	101	189
Mauritius	0	0	-	-	80	297	61	268	37	602	36	233
Tanzania	-	-	10	5	-	-	44	141	35	271	18	84
Other	1,111	2,067	552	1,387	584	1,117	362	895	107	669	543	1,227
Total	1,825	3,940	1,939	4,132	2,270	5,424	2,596	6,591	1,384	7,068	2,003	5,431

Source: National Statistics Office(NSO)

04021000: Milk and Cream in Solid Forms Of \leq 1.5% Fat

04022100: Milk and Cream in Solid Forms Of $>$ 1.5% Fat, Unsweetened

04022900: Milk and Cream in Solid Forms Of $>$ 1.5% Fat, Sweetened

Malawi Commercial Milk and Cream Imports

	2003		2004		2005		2006		2007	
	MT	\$000s	MT	\$000s	MT	\$000s	MT	\$000s	MT	\$000s
Zimbabwe	4,149	2,092	2,207	1,367	1,442	788	1,132	752	818	541
South Africa	58	84	60	92	156	157	138	169	142	80
Zambia	161	37	94	41	207	150	123	148	182	166
Others	11	4	6	4	73	77	5	2	1	1
Total	4,379	2,217	2,367	1,504	1,878	1,172	1,397	1,071	1,143	789

Source: National Statistics Office(NSO)

04011000: Milk and cream of \leq 1% Fat ,Not concentrated or sweetened

04012000: Milk and cream of $>$ 1% But \leq 6% Fat, Not concentrated or sweetened

04013000: Milk and cream of $>$ 6% Fat ,Not concentrated or sweetened

Malawi Consumption of Milk Powder

		2003	2004	2005	2006	2007	Average
01	Domestic Production (WMPE)	744	919	955	849	1,129	919
02	Imports	2,399	2,441	2,559	2,822	1,565	2,357
03	Commercial - Milk Powder	1,825	1,939	2,270	2,596	1,384	2,003
04	Commercial - Milk & Cream	573	310	246	183	150	292
05	Concessional	0	192	43	44	32	62
06	Distributed	0	192	43	44	32	62
07	Monetized	0	0	0	0	0	0
08	Exports	15	0	0	5	2	4
09	Commercial	15	0	0	5	2	4
10	Local Procurement	0	0	0	0	0	0
11	Apparent Disappearance	3,128	3,361	3,514	3,665	2,693	3,272
12	Import Share of Consumption	77%	73%	73%	77%	58%	71%
13	Producer Price (US\$/MT)		-	-	-	-	-
14	Wholesale Market Price (US\$/MT)	-	-	-	-	-	-
15	Retail Prices (US\$/MT)	-	-	-	-	-	-
16	Monetized Price	n/a	n/a	n/a	n/a	n/a	
17	IPP (annual average) US\$/MT	1,963	2,383	2,636	2,727	5,309	
18	FOB – Europe	1,785	2,166	2,267	2,341	4,624	
19	International Transport/Handling	n/a	n/a	75	79	134	
20	Customs Duty	10%	10%	10%	10%	10%	
21	Inland Transport	n/a	n/a	60	65	75	

N/A = Not Available

- 01 Shire Highlands Milk Processors Association (SHMPA)
Converted from liters to metric tons (Whole Milk Powder Equivalent) at 0.13094 MT per 1,000 lt, Irish Dairy Board
- 02 Commercial (03,04) + Concessional (05) Imports
- 03 National Statistics Office (NSO)
04021000: MILK AND CREAM IN SOLID FORMS OF <1.5% FAT
04022100: MILK AND CREAM IN SOLID FORMS OF >1.5% FAT, UNSWEETENED
04022900: MILK AND CREAM IN SOLID FORMS OF >1.5% FAT, SWEETENED
- 03 National Statistics Office (NSO)
- 04 National Statistics Office (NSO), Converted to Whole Milk Powder Equivalent
- 05 Distributed (06) + Monetized (07) Imports
- 06 Cooperating Sponsors (WFP)
- 07 N/A: Milk Powder has not previously been monetized in Malawi
- 08 Commercial Exports (09) + Local Procurement for Export (10)
- 09 National Statistics Office (NSO)
- 10 N/A: Milk Powder has not previously been procured locally
- 11 Domestic Production (1) + Imports (2) - Exports (8)
- 12 Percentage of Total Imports (02) to Apparent Disappearance (11)
- 13 N/A
- 14 N/A
- 15 N/A
- 16 N/A: Milk Powder has not previously been monetized in Malawi
- 17 Calculation of (FOB Value + International Transport) x (1 + Customs Duty) + Internal Transport

- 18 *University of Wisconsin, Madison*
- 19 *International Grains Council (IGC)/Fearnleys research, Calculation based on TC and fuel rates*
- 20 *Malawi Revenue Authority (MRA)*
- 21 *Local Freight Forwarder Estimate*

Detailed Milk Powder IPP Calculation

Month	FOB - EU	INS	Int'l Freight	Handling	Customs	Inland Freight	Estimated IPP	IPP Moving Avg
Oct-05	2,275	6.83	56.21	15.00	235.30	60.00	2,648	2,592
Nov-05	2,219	6.66	52.38	15.00	229.28	60.00	2,582	2,585
Dec-05	2,200	6.60	50.14	15.00	227.17	60.00	2,559	2,578
Jan-06	2,213	6.64	49.39	15.00	228.35	65.00	2,577	2,572
Feb-06	2,200	6.60	46.95	15.00	226.85	65.00	2,560	2,561
Mar-06	2,181	6.54	47.82	15.00	225.06	65.00	2,541	2,563
Apr-06	2,175	6.53	48.59	15.00	224.51	65.00	2,535	2,567
May-06	2,206	6.62	50.32	15.00	227.82	65.00	2,571	2,575
Jun-06	2,231	6.69	53.40	15.00	230.63	65.00	2,602	2,596
Jul-06	2,213	6.64	56.56	15.00	229.07	65.00	2,585	2,645
Aug-06	2,250	6.75	61.25	15.00	233.30	65.00	2,631	2,726
Sep-06	2,317	6.95	66.18	15.00	240.48	65.00	2,710	2,851
Oct-06	2,469	7.41	68.68	15.00	255.98	65.00	2,881	2,988
Nov-06	2,669	8.01	66.47	15.00	275.82	65.00	3,099	3,179
Dec-06	2,988	8.96	66.90	15.00	307.84	65.00	3,451	3,392
Jan-07	3,075	9.23	68.33	15.00	316.76	75.00	3,559	3,724
Feb-07	3,400	10.20	69.15	15.00	349.44	75.00	3,919	4,091
Mar-07	3,579	10.74	73.87	15.00	367.88	75.00	4,122	4,478
Apr-07	4,400	13.20	80.28	15.00	450.85	75.00	5,034	4,837
May-07	4,763	14.29	96.83	15.00	488.86	75.00	5,452	5,211
Jun-07	5,089	15.27	95.45	15.00	521.45	75.00	5,811	5,556
Jul-07	5,225	15.68	98.14	15.00	535.38	75.00	5,964	5,858
Aug-07	5,400	16.20	111.67	15.00	554.29	75.00	6,172	5,960
Sep-07	5,533	16.60	127.74	15.00	569.27	75.00	6,337	5,957
Oct-07	5,425	16.28	142.96	15.00	559.92	75.00	6,234	5,856
Nov-07	4,981	14.94	148.22	15.00	515.94	75.00	5,750	5,769
Dec-07	4,688	14.06	151.50	15.00	486.81	75.00	5,430	5,649
Jan-08	4,388	13.16	137.94	15.00	455.36	95.00	5,104	5,498
Feb-08	4,625	13.88	125.74	15.00	477.96	95.00	5,353	5,352
Mar-08	4,604	13.81	130.88	15.00	476.39	95.00	5,335	5,276
Apr-08	4,550	13.65	134.11	15.00	471.28	95.00	5,279	5,250
May-08	4,475	13.43	150.81	15.00	465.42	95.00	5,215	5,197
Jun-08	4,475	13.43	154.30	15.00	465.77	95.00	5,219	5,012
Jul-08	4,513	13.54	144.29	15.00	468.53	95.00	5,249	4,758
Aug-08	4,058	12.18	130.77	15.00	421.63	95.00	4,733	4,456
Sep-08	3,463	10.39	112.66	15.00	360.06	95.00	4,056	4,329
Oct-08	3,056	9.17	68.06	15.00	314.85	95.00	3,558	4,151
Nov-08	2,725	8.18	39.63	15.00	278.78	95.00	3,162	3,877

ANNEX V: FFP POLICY ON USE OF MILK POWDER FOR MONETIZATION

USAID's Office of Food for Peace (FFP) will consider proposals for monetization of Non-Fat Dry Milk (NFDM) under the following conditions:

1. The Cooperating Sponsor (CS) will provide FFP a written policy for the monetization of NFDM. This policy must comply with the International Code of Marketing of Breast milk Substitutes and all subsequent relevant World Health Assembly (WHA) resolutions pertinent to the sale or distribution of breast milk substitutes. CS will include a statement under "special provisions" which states, "it is the intention of the U.S. Government that the NFDM commodities provided herein are not to be used as breast milk substitutes, nor in their production or manufacture."
2. Preference will be given to countries that have current laws or policies implementing the International Code of Marketing Breast milk Substitutes.
3. NFDM may be sold for industrial use as an ingredient in processed foods, baked goods, yogurt, etc. NFDM must not substitute for breast milk or be used for products represented or locally perceived as breast milk substitutes. It must not be sold for direct market distribution, for example, in small tender sales, and should not be sold directly to the consumer.
4. CS will not sell NFDM to known manufacturers or marketers of breast milk substitutes or replacement foods with breast milk substitute production facilities in the program country. **The sales contract will have a written commitment from the buyer that the product will not be sold or freely distributed as a breast milk substitute, nor used to manufacture breast milk substitutes and that the sellers name or the name or logo of USAID will not be used in marketing, advertising, product promotion or any implied relationship to any of the manufacture's products. Further, CS shall make it clear to the buyer that failure to comply with this clause will constitute a material breach of the contract.**
5. CS will submit to FFP, as part of the proposal, a plan to monitor for a reasonable period of time the end-use of the product. Information should include sensitivity to problems in countries with high lactose intolerance, proper storage and handling, and possible leakage from the buyer to the general market. This monitoring plan must be in place prior to the arrival of the commodity in the country.
6. The buyer agrees in writing that the uses of NFDM will be accessible for monitoring by USAID personnel to ensure that the use of NFDM adheres to the above policy and does not violate the International Code of Marketing of Breast milk Substitutes.

7. NFDM commodities for monetization must be labeled, "Not for feeding children under one year of age." If repackaged for any reason, any such package should also be so labeled.
8. To ensure market parity, all Title II and FFP policies and regulations, including cost-recovery, Bellman and Usual Marketing Requirement (UMR) considerations shall apply.
9. The Director of the Office of Food for Peace must approve in writing any exceptions to the above policy.