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U.S. Agency for International Development
Mission to Ethiopia

From Ports to People:
A Logistics & Transport Assessment
for Relief Food Imports During 2000

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List of Acronyms

| | |
|---------------|--|
| CAA | Civil Aviation Authority |
| CRS | Catholic Relief Services |
| CIDA | Canadian International Development Agency |
| DFID | Department for International Development (UK) |
| DPPC | Disaster Prevention and Preparedness Commission |
| EGTE | Ethiopian Grain Trade Enterprise |
| EFSRA | Ethiopian Food Security Reserve Administration |
| EFSRA | Ethiopian Food Security Reserve Administration |
| ERA | Ethiopian Roads Authority |
| EOPEC | Oil Seeds & Pulses Export Corporation (|
| EU | European Union |
| FAO | Food and Agricultural Organization |
| FHI | Food for the Hungry International |
| GFDRE | Government of the Federal Democratic Republic of Ethiopia |
| GTZ | Deutsche Gesellschaft fur Technische Zusammenarbeit |
| GIS | Geographic Information System |
| IDP | Internally Displaced Person |
| JTO | Joint Transport Operation (of SCF and Oxfam) |
| LTCD | Logistics & Transport Coordination Department |
| RTA | Road Transport Authority |
| RTCC | Relief Transport Coordination Center |
| SCF/UK | Save the Children UK |
| SNNPR | Southern Nations Nationalities & Peoples Region |
| UNDP | United Nations Development Programme |
| UN-EUE | United Nations Emergency Unit for Ethiopia |
| USAID | United States Agency for International Development |
| USDA | United States Department of Agriculture |
| UNHCR | UN High Commission for Refugees |
| WFP | World Food Programme |

1. Introduction

1.1 Background

- 1.1.1 As a result of the poor 1998 meher and 1999 belg harvests, and increasing vulnerability in previous years, relief food needs for people affected by drought and crop failure have been increasing significantly. Since the end of 1998 the number of people in need of assistance has risen to 4.7 million for the first half of CY2000 – requiring an average of 92,200 tons of food per month. An additional 3 million people are also estimated to require assistance to the end of the year.
- 1.1.2 In spite of the robust efforts of the GFDRE and aid community during the latter part of CY1999, food shortages have continued. New areas of concern identified are within the Somali, Borena and Gambella regions. To meet the increasing needs, as well as those of the internally displaced the DPPC has been drawing down on food stocks. They also launched a bridging appeal at the end of 1999 to cover unmet needs plus additional needs through the first quarter of CY2000.
- 1.1.3 Following estimates produced by the national crop and food supply assessment, the DPPC launched an emergency appeal for 836,800 tons of food assistance plus 62,549 tons of food supplies for the internally displaced. Although these estimates are based on need for 12 months, they may well increase significantly if the belg harvest fails this year.
- 1.1.4 National food stocks will remain low until the 1999 harvest is fully gathered. The FAO/WFP mission was cautious in its analysis for CY2000 especially with regard to the belg, which it predicted at being well below average – due largely to a serious shortage of oxen for cultivation. Out of the anticipated food requirement for CY2000 the majority will be used for emergency relief assistance. There may be scope for the local purchase of a maximum of 110,000 tons of cereals in surplus producing areas. However, as all of this food would have to be gathered and transported from these rural areas, the procurement process will take at least nine months from the end of February.

1.2 The current situation

- 1.2.1 In order to meet immediate distribution needs, large amounts of food have already been borrowed from the EFSRA. This was on the assumption that most loan repayments were to be received by the end of CY1999 and that therefore there would be a stock carryover. However, this has not been the case and current food stock levels are now dangerously low. As at January 26, EFSRA stock available for release was 104,209 tons (excluding a reserve stock). Over 213,347 tons of loans to the EFSRA remain outstanding. This is the first time that there has been more than 100,000 tons of outstanding loans at the beginning of a calendar year.

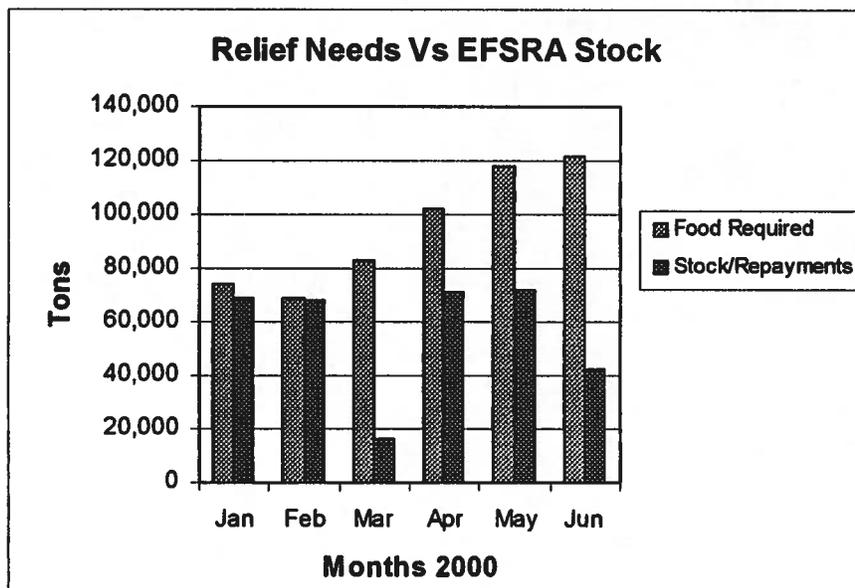
- 1.2.2 The main cause for this situation is significant delay in scheduling and importing donor repayments. The European Union, which owes 78,000 tons of food, WFP 45,000 tons and USAID/USDA owe 90,000 tons that should have arrived in the latter part of 1999.
- 1.2.3 Following discussion with the these donors and based on previous import patterns as well as projected schedules, it is likely that the majority of the outstanding loan repayments will be imported between March and June (see table 1.3 below). However, this will not be sufficient to ensure that relief food needs are fulfilled by the EFSRA. While donor pledges against the DPPC's appeal may be forthcoming, it will take several months to mobilize and import the food. There is therefore an urgent requirement to identify alternative sources of food aid.

Table 1.3 – Likely Outstanding EFSRA Loan Repayment Schedule

| Donor | Jan | Feb | Mar | Apr | May | Jun | Total |
|--------------------|---------------|----------|---------------|---------------|---------------|---------------|----------------|
| USAID | 0 | 0 | 0 | 38,000 | 26,000 | 26,000 | 90,000 |
| EU | 0 | 0 | 16,665 | 0 | 30,772 | 16,156 | 78,093 |
| WFP | 8,670 | 0 | 0 | 30,000 | 13,304 | 0 | 51,974 |
| Others | 10,562 | 0 | 0 | 3,000 | 1,755 | 0 | 15,317 |
| Total Tons: | 19,232 | 0 | 16,665 | 71,000 | 71,831 | 42,156 | 235,384 |

Source: WFP Shipping Bulletin 25/01/2000

- 1.2.4 The graph below demonstrates the current likely scenario if predicted relief needs during the first half of CY2000 are met through issues from the EFSRA and carry over stock of 77,000 tons available from the DPPC and NGOs.



- 1.2.5 This scenario predicts a cumulative shortfall of over 150,000 tons by the end of June. In order to fill this gap, the GFDRE together with aid organizations will need urgently to identify alternative sources of relief food. This will be vital in order to ensure that adequate supplies can be pre-positioned before the on-set of the main

rains in July, which typically disrupt access to beneficiaries residing in remote highland areas of Amhara region.

- 1.2.6 While some commercial food will be imported, the only other viable yet limited source of food will be with the State farms. Clearly, therefore, donors must be encouraged not only to expedite their repayments to the EFSRA but also to import additional pledges by June. It will also be essential for incoming food aid to be handled and distributed as efficiently as possible.
- 1.2.7 Based on these assumptions, this report sets out to assess the capability of logistics and transport components that are available to handle and distribute large quantities of food aid and to make recommendations as to how these can be better utilized to cope with relief needs.
- 1.2.8 Given the magnitude need, of primary consideration is the capacity of the long-haul and short-haul transport sectors to cope with bulk cargo off-take from the port and the final distribution of emergency relief food to beneficiaries. Furthermore, it will be vital to ensure that the port of Djibouti does not become congested and that capacity is effectively utilized.

2. Resources available for food distribution

2.1 Road Transport Fleet

- 2.1.1 The primary information system related to road transport is the Road Transport Authority (RTA) vehicle registration system, operating on an IBM AS400 mainframe, which is only operational in the RTA central Addis Ababa office. The present mainframe and linked workstations cannot directly output digital data that is compatible with PC based systems. For each vehicle the database includes details of its owner, make, model, age, type, capacity, tire size and the history of its ownership and annual inspections. Vehicle location can be traced as far as the region of registration and owner's address. The vehicle type includes all the different categories of trucks (including 4 wheel drive) and vehicle capacity in passengers, quintals or liters.
- 2.1.2 The RTA system is historically accurate up to 1991, however after that responsibility for registration passed to the regional transport and communication bureaus, which are currently not obliged to forward records to the central office. Despite much informal pressure, the only regions passing on all records are Amhara, Addis Ababa and Dire Dawa. Of the others the Southern region pass on some records and the Afar region has the capacity only to issue Addis Ababa license plates. The RTA central office estimates the database to contain about 80% of the total vehicles.
- 2.1.3 Currently over 90% of all freight is moved by road with about 60% of this along the port to Addis Ababa corridor. The long haul truck capacity¹ of the country generally seems adequate to meet the demands of transporting goods from Djibouti. During busy periods it can, however, be difficult to persuade private transporters to operate away from the port corridors. More serious concerns have been expressed over the lack of short haul 4 wheel drive trucks, capable of moving emergency supplies into remote areas over roads in poor condition where large trucks cannot operate during the rainy seasons. The overall capacity of the country's truck fleet should not be over-estimated as it can be assumed that many registered trucks are not in an operationally useful state of repair. It is therefore important that all transport resources be carefully coordinated and managed during periods of peak demand.
- 2.1.4 Records indicate that there are approximately 40 associations of truck owner-operators throughout the country. It is difficult to assess the exact number of serviceable association trucks but this is likely to be about 3,000. Many work without formal contracts and tend to move cargo on an ad-hoc basis. With the increase in the number of high capacity long-haul trucks procured over the past five years, association trucks – which are mostly low capacity short-haul vehicles –

¹ WFP maintains an up to date database of transport companies. This indicates that a total of approximately 5,556 trucks are available for food aid transport work (2,424 long-haul trucks and 3,131 short-haul trucks). Given that this information is available, it has not been necessary to reproduce the database in this report.

have gradually decreased their activity along the port corridors. However, with truck numbers therefore increasing on secondary routes, encouraged in part by better transport rates, associations have been able to play an increasingly important food distribution role. The DPPC is also currently using Somali trucks successfully to deliver assistance to beneficiaries in the Ogaden.

- 2.1.5 Based on experience in mid 1999, the DPPC now appears to be confident that most secondary transport needs could be met. It will be important though for food to be available to distribute before the onset of the main rains. According to the DPPC Logistics and Transport Coordination Department (LTCD), the following deliveries were made from Addis Ababa, Nazareth, Kombolcha, Dire Dawa and Mekele to beneficiaries:

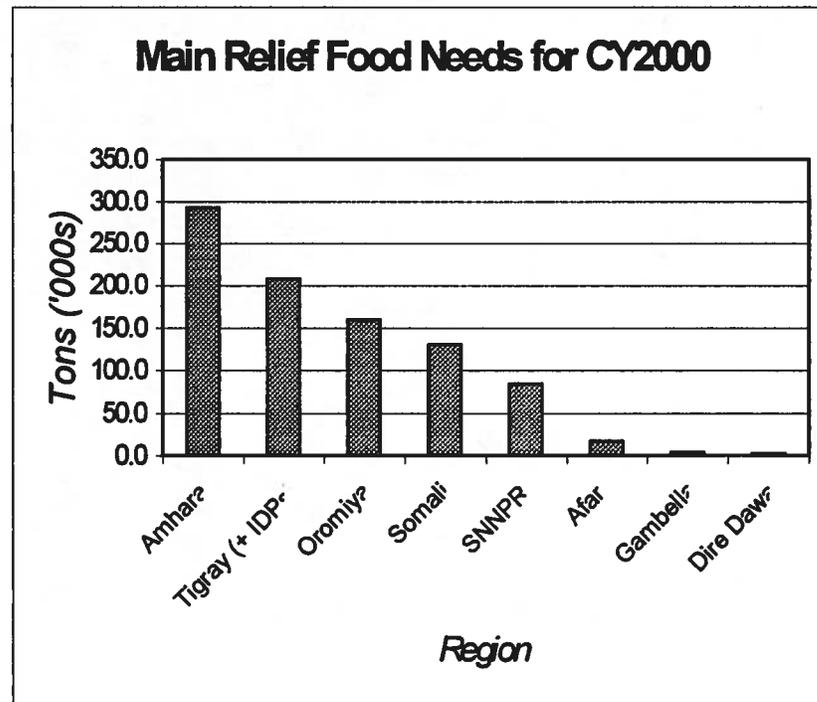
Table 2.1 Short-Haul Truck Utilization April – Sept. 1999

| <i>Month</i> | <i>Tons Moved</i> | <i>Truck Trips</i> | <i>Estd No. Trucks Used</i> |
|--|-------------------|--------------------|-----------------------------|
| April | 14,916 | 1,243 | 178 |
| May | 69,228 | 5,769 | 824 |
| June | 40,860 | 3,405 | 486 |
| July | 27,840 | 2,320 | 331 |
| Aug. | 26,976 | 2,248 | 321 |
| Sept. | 44,532 | 3,711 | 530 |
| Total: 224,352 Avg/Mnth: 3,116 Avg/Mnth: 445 | | | |
| <i>Estd. Annual Total: 448,704</i> | | | |

- 2.1.6 It should be noted that not all available short-haul trucks were used for relief distributions because, for example, the commercial sector was moving supplies within the country and the Ministry of Agriculture were also delivering food to project sites during the same period.
- 2.1.7 With the recent closure of the Save the Children & Oxfam Joint Transport Operation, there are now no longer any NGO transport fleets in use. The only specialized fleet available is the Strategic Relief Fleet (SRF) which was formed in 1998 out of part of the Transport Operation for Refugees (TOR). The SRF operates about 100 four-wheel drive Mercedes trucks. Although, this fleet has been working on the Eritrean border for the past two years, it is understood that up to 50% of the fleet is available again for humanitarian use.
- 2.1.8 Current estimates indicate that there are at least 2,500 serviceable long-haul trucks operating along the main transport routes (see chart at appendix 1). In general these vehicles are focused along the routes from Djibouti to Addis Ababa, Kombolcha and Mekele. The long-haul transport sector is made up of three parastatal enterprises, namely; Comet, Bekelcha and Shebelle. There are now approximately 40 private companies but most are small with about 50% operating less than 10 vehicles. The biggest private company is now Tana, which operates over 200 new high capacity trucks and a number of fuel tankers. Dominating these operators, however, are several party-owned or affiliated companies. The largest of these is the Trans-Ethiopia Share Company (TESCo) with over 300 trucks. Others now include Tukur-Abay Transport and Dinsho

Transport, which are related to the Amhara National Democratic Movement (ANDM) and Oromo Peoples Democratic Organization (OPDO) respectively.

- 2.1.9 At a serviceability rate of 75%, at least 1,875 trucks (of 2,500 operational long-haul trucks) will make about 3 trips per month between Djibouti and various primary destinations. Cargo uplift would therefore be in the region of 180,000 tons per month (average truck payload is 32tons) or up to 2.1 million tons per year. Assuming a food aid transport requirement in the region of 900,000 tons during CY2000, there appears in theory to be sufficient capacity to move both aid and commercial cargo. It should be noted that the long-haul transport sector is also responsible for about 50% of deliveries to accessible beneficiary distribution sites, with the balance of transport needs being met by the short-haul (primarily association) transport sector.
- 2.1.10 The graphic below shows that based on the DPPC's emergency appeal, the majority of relief food will be destined to northern Ethiopia. Therefore the focus of logistics activity will be in Amhara and Tigray Regions. The advantage to this is that the EFSRA stores in Kombolcha can be used as a transit hub and thus, as high capacity long-haul truck turn around time to the port can be less than three days, truck resources can be maximised.



2.2 Railway

- 2.2.1 The only railway line operational in the country is the Djibouti - Dire Dawa - Addis Ababa line, operated by the Chemin de Fer Djibouto-Ethiopien company, which is jointly owned by the two countries it operates between. The railway's bilateral ownership makes it less flexible to change. However since the main bilateral routes through Eritrea are now closed its effective use has become vital.

Unfortunately the system is in a dilapidated condition and numerous studies have been carried out for proposed upgrading by the EC and other donors. At present it handles less than 10% of Ethiopia's imports. WFP uses the railway for some of its imports from Djibouti and has recently been achieving port off-takes rates of up to 400 tons per day or 12,000 tons per month.

- 2.2.2 Ministry of Transport and Communication figures estimates the current railway rolling stock at 8 locomotives, 4 shunting locomotives and 429 wagons of average 40-ton capacity each. Each locomotive can pull a train of about 10 wagons (about 400 ton capacity) at one time. The railway does have a greater capacity than is currently being used; its increased use in emergency situations to free up trucks for use elsewhere should be considered for contingency planning purposes.
- 2.2.3 To logistics operators the railway is seen to be slower, geographically less versatile and no cheaper than road transport. Lack of warehouse storage close to the Dire Dawa station requires the use of trucks to transfer stock from the train to the warehouses nearby. However, recent indications are that plans exist to construct a new rail link between Djibouti, Dikhil, Mieso and Awash. This would reduce the rail distance to Ethiopia by 150kms and significantly improve import and export capacity.

2.3 *Air Transport*

- 2.3.1 Data on existing aircraft in Ethiopia including make, payload, age, etc. is maintained at the Civil Aviation Authority (CAA). In emergency situations bulk cargo aircraft may be flown in from surrounding countries in a matter of hours without regard to the intervening terrain. The leasing of cargo aircraft is a complex business and is best organized by major relief organizations such as bilateral donors and WFP. In the past, airlift operations have relied in part on the willingness of international airforces to provide cargo aircraft. Frequently such aircraft are provided free of charge for training purposes on the understanding that all fuel and support costs are met.
- 2.3.2 Abyssinian Flight Services operate light aircraft that are primarily used for routine humanitarian related transport into remote areas of Ethiopia. Their pilots usually update information on all airstrips visited. Available information² relating to airstrips is extremely valuable and provides GPS coordinates, runway length and condition, suitability for bulk cargo aircraft, known hazards for landings and takeoffs etc.

2.4 *Ports - Berbera and Djibouti*

- 2.4.1 While Djibouti remains the primary port of entry for Ethiopian goods, there are now fewer restrictions on the use of the Somaliland port of Berbera. In 1999 the EU chartered 3 vessels and successfully imported a total of 48,330 tons of food aid. A fourth vessel is due to be chartered to Berbera in early 2000. Due to the

² A runway database has also been maintained by UNDP-EUE.

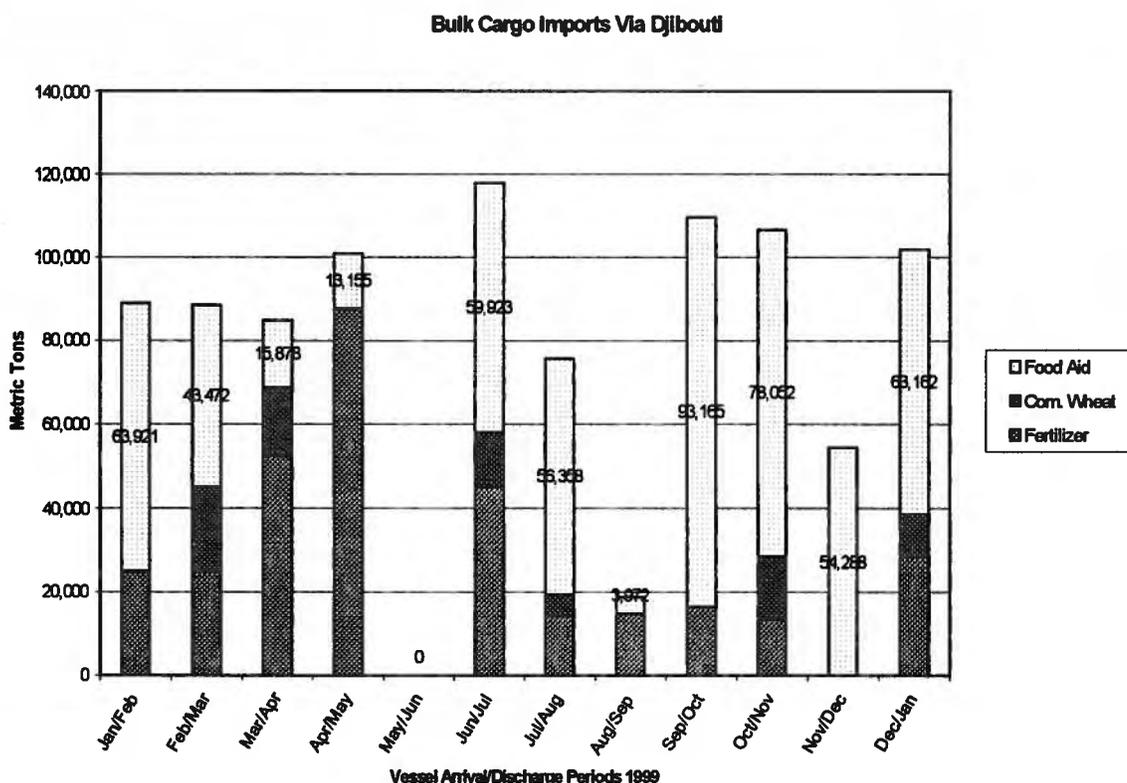
lack of bagging facilities in the port, all shipments have been of bagged cargo³, about 50% of which has been discharged under direct delivery. There are also no shore cranes available, so ship's gear must be used. Performance shows that a daily discharge rate of 2,500 to 3,000 tons is feasible but more realistically 1,500 can be sustained. The port handled 320,000 tons of cargo in 1999.

- 2.4.2 Currently stevedoring and port charges amount to \$8.0 to \$10.0 per ton, which is competitive with Djibouti. Should cargo volumes increase, negotiations could perhaps reduce these rates. However, donors should be willing to pay premium rates to assist with Somaliland development and stability. The port is equipped with a 40-ton digital weighbridge and has storage capacity of 20,000 tons, which may be used free of charge for up to one week – thereafter charges are \$0.50 per ton per day. Additionally, there is about 100,000 tons of storage capacity available in Berbera town.
- 2.4.3 Due to poor road conditions (April being the worst month for rain), Ethiopian trucks are not able to go Berbera as they are not technically suitable. It is likely that they also would not be welcomed at this stage. The Somalis use 20-24 ton capacity trucks without trailers. According to the EU Local Food Security Unit, approximately 300 to 400 trucks have been engaged in their operations and there are signs that more trucks may be available if Berbera is further utilized for Ethiopian cargo. Off-take from the port has been performed efficiently and consignments delivered to Dire Dawa, Shinile EFSRA stores. The Ethiopian Government does not permit Somali trucks to travel beyond this point. The distance from Berbera to Dire Dawa is 472 kms (316 kms to Jijiga), compared to that from Djibouti, which is 323 kms. The EU has paid \$49.0 per ton (\$0.1038/Mt/Km) to transport food aid from Berbera to Dire Dawa. This is the same transport rate as that from Djibouti.
- 2.4.4 The apparent success in using Berbera port has prompted the EU to consider opening an office there to facilitate the coordination of aid imports. Additionally, the GFRDE has indicated its interest in using Berbera as an alternative to Djibouti. To this end, the Ethiopian Roads Authority has performed a study to upgrade the road connection between Somaliland and Ethiopia.
- 2.4.5 Since the beginning of 1998, cargo volumes for Ethiopia through the port of Djibouti have increased by almost 70%. While there were initially significant operational problems in using the port as an alternative to the ports of Assab and Massawa, Djibouti has since made strenuous efforts to improve its efficiency in relation to the handling of bulk cargo. Between mid-1998 and mid-1999, overall cargo volumes had increased from 1.5 to 1.9 million tons. With planned improvements and a developing relationship with the free port of Dubai, Djibouti hopes to double this amount.
- 2.4.6 The Djibouti port authority owns 19 warehouses within the port area. However, the stores at berth 13 will soon be removed as part of the WFP-funded special

³ The cost of shipping pre-bagged food is much higher than shipping food in bulk.

operation to help improve the port's bulk cargo handling facilities. Additionally, several hectares of parking for 200 trucks, bulk and container storage area is being prepared approximately 1 km outside of the port. The majority of new facilities may be ready between the middle and end of the year. In the mean time, in order to encourage cargo owners to remove consignments, free port storage time has been reduced from 45 to 30 days.

2.4.7 Additionally, WFP has increased its rented storage capacity in the town of Djibouti to 26,000 tons. This has enabled WFP-chartered vessels, as well as other shipments coordinated by WFP, to achieve high vessel discharge rates because cargo is unloaded both through direct delivery and to storage. Recent operations have achieved sustained rates of 2,500 to 3,000 tons per day. In theory, therefore, two bulk cargo vessels could discharge up to 6,000 tons per day or perhaps realistically 120,000 tons per month. Indeed, this amount was achieved in June/July 1999. (See graph – data source WFP 1999 Final Report).



2.4.8 Although sometimes 50% of cargo is put to storage, transport capacity from Djibouti, primarily under the WFP/FATS program as well as by rail, has been sufficient to ensure that supplies are moved in a timely manner. However, there is a relatively high cost to this achievement – WFP port charges are \$11.25 per ton and, with transport included to say Dire Dawa, a total of \$52 per ton.

2.6 Roads

- 2.6.1** Information on the location and condition of roads, bridges and other transport-related infrastructure are of primary importance to the development of a transport and logistics action plan. Now funded primarily by the Road Fund Administration, the Ethiopian Roads Authority (ERA) is responsible for all new road construction and the maintenance of existing major highways and related structures. District offices of the ERA have been transferred to the regions of Ethiopia and assume responsibility for the maintenance of rural roads. However, no systematic system at present is used to track road conditions. Such information is currently known informally by the ERA surveyors responsible for particular areas.
- 2.6.2** As previously mentioned, the ERA have studied the feasibility of upgrading the road from the Somaliland border to Jijiga. They have also studied the route from Gonder to Metema on the border with Sudan. It is understood that there is GFRDE approval now for work to commence in both locations. While the cost of this work will probably be met by the Road Fund Administration (which releases money against ERA/contractor performance), there is concern that the ERA does not have sufficient capacity to actually do the work quickly.
- 2.6.3** In order to improve truck travel times, the Governments of Ethiopia and Djibouti have reached agreement to maintain the worst affected section of the road, within Djibouti, from Arta to Gelafi. However, due to capacity constraints, this work is proceeding slowly.

2.7 Warehouse Facilities

- 2.6.4** The location, capacity and up to date stock information of storage facilities is an area that has many related information systems, none of which give an overall view for logistics planning. Most attempt only to track details of stock movements and distribution figures for a particular organization's own operation.
- 2.6.5** No centralized list of all warehouse facilities currently exists except for a database compiled by UNDP/EUE in the late 1980s, which was updated by the Natural Resources Institute as part of a study in 1996 on the potential role of the private sector in national food security reserve storage. This data together with other information is available as part of a wider (yet unfinished) EU-sponsored study on the EFSR. However, a summary of major warehousing is presented in appendix 2. The estimated total national storage capacity could now be greater as new warehouses have been constructed since the information was compiled.. These include a number of relief food outlets in remote, food vulnerable areas, that have been funded under the CIDA/SCF(UK) institutional support program.
- 2.6.6** The most important storage capacity available to aid the Government and organizations is that held by the Emergency Food Security Reserve Administration (EFSRA). See map of locations at appendix 3. Although the current (1999) maximum EFSRA capacity is 357,000 tons, stocks have never reached this target. Indeed the present EFSRA stores would not accommodate this amount.

The EU have pledged to provide an additional 50,000 tons of stock taking the potential total to 407,000 tons at the end of as of CY2000.

Table 2.2 – EFSRA Warehouse Capacity (includes EGTE rented stores)

| Location | Warehouses | Capacity Tons | Remarks/Additional Capacity Available |
|-----------------------|------------|---------------|--|
| Nazareth | 8 | 38,000 | DPPC store - capacity of 80,000 tons |
| Kombolcha | 14 | 74,000 | DPPC store - of 15,000 tons |
| Mekele | 9 | 45,000 | |
| Sheshemane | 4 | 20,000 | |
| Dire Dawa | 7 | 33,000 | DPPC store - capacity of 15,000 tons |
| Wollayita Sodo | 12 | 53,200 | <i>New capacity of 41,200 ready by year end. 3 Rubb-Halls not used at present for long-term storage as extractors not working due to electrical supply problems.</i> |
| Woreta (New) | 11 | 50,300 | <i>New warehouses ready by mid 2000.</i> |
| Present capacity: | | 222,000 | |
| Capacity by mid 2001: | | 313,500 | |

- 2.6.7 The Ministry of Finance allocates a budget of up to Birr 2.0 million to the EFSRA to cover store rent should increased capacity be required. Storage costs are generally relatively low. Table 2.3 shows recent likely charges that would be incurred.

Table 2.3 – Tender Results for Storage Contract Management in Nazareth

| | EGTE | EFSRA | TRADER1 | TRADER2 | TRADER3 |
|---------------------------|----------------|----------------|----------------|----------------|----------------|
| Total Fixed Costs | Br6,176.00 | Br37,134.00 | Br5,576.00 | Br19,320.00 | Br11,526.00 |
| Capacity (Tons) | Br5,000.00 | Br31,512.00 | Br4.00 | Br5.00 | Br5.00 |
| Fixed Cst/ton/month | Br1.24 | Br1.18 | Br1.39 | Br3.86 | Br2.31 |
| <i>Service charges</i> | | | | | |
| Loading cost/ton | Br5.00 | Br5.00 | Br5.00 | Br10.00 | Br8.50 |
| Unloading cost/ton | Br5.00 | Br5.00 | Br5.00 | Br10.00 | Br8.50 |
| Re-bagging cost/ton | Br3.00 | Br3.00 | Br3.00 | Br15.00 | Br10.00 |
| New bags cost/ton | Br2.50 | Br2.50 | Br2.50 | Br2.50 | Br2.50 |
| Fire insurance/ton | Br4.60 | Br4.60 | Br4.60 | Br4.60 | Br4.60 |
| Theft insurance/ton | Br4.60 | Br4.60 | Br4.60 | Br4.60 | Br4.60 |
| Deprcn/month/ton | Br1.70 | Br0.80 | Br2.00 | Br1.00 | Br1.70 |
| Fumigation/ton | Br3.50 | Br2.50 | Br3.50 | Br2.50 | Br2.50 |
| Total charges/ton: | Br29.90 | Br28.00 | Br30.20 | Br50.20 | Br42.90 |

Source: Natural Resources Institute Study

- 2.6.8 In times of non-emergency need, the EFSRA loans food to development programs and for refugees. The EFSRA Technical Committee would normally agree to stop such releases in times of emergency in order to maintain around 25% of stock. Due to the situation in 1999, few non-emergency releases were approved. It should be noted that FSR is designed to maintain bridging stock to meet the needs of up to 4.2 million people for 4 months. However, the 4 month lead-time from pledge to delivery is not realistic as donors frequently delay their repayments.

3. Cargo Import and Transport

3.1 Bulk Cargo Import Predictions

- 3.1.1 There are essentially four varieties of dry bulk cargo imported into Ethiopia, these are; food aid, fertilizer, commercial wheat and break-bulk cargo (steel, bitumen, palletized items etc). In 1999 according to WFP reports, imports included 545,346 tons of food aid, 323,176 tons of fertilizer and 79,340 tons of commercial wheat. In all, almost 950,000 tons (see graph at 2.4.7 above). Additionally, based on Djibouti port statistics, it is estimated that about 785,000 tons of commercial cargo (excluding oil products) was also imported. (NB. It has not been possible to determine the split between break-bulk and containerized cargo). Thus about 1.7 million tons of dry cargo was imported into Ethiopia last year.
- 3.1.2 Total food needs for CY2,000 are almost 960,000 tons (see table 3.1 below). Of this amount a total of about 216,000 tons is available. Therefore, additional requirements amount to about 742,800 tons. Given that outstanding loan repayments to the EFSRA must be made this year there will be a need to import approximately 846,000 tons of food aid between February 2000 and early 2001.

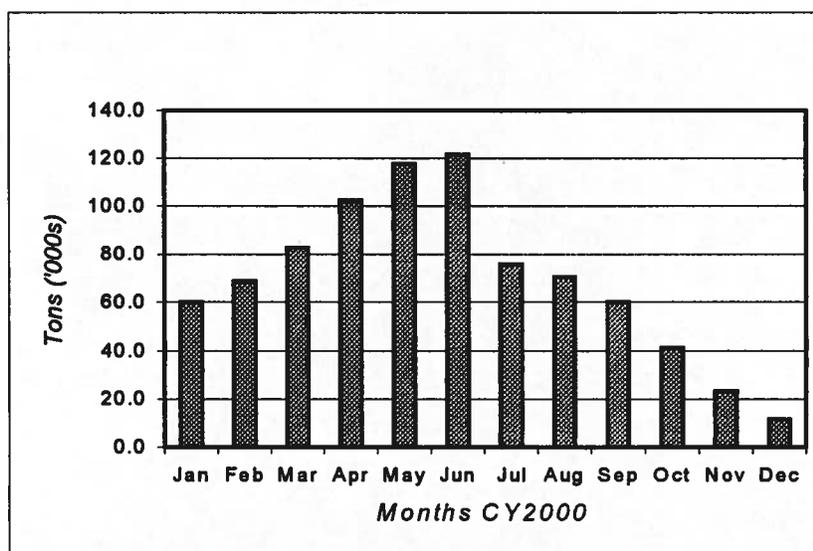
Table 3.1 – Estimated Food Import Requirement

| | Est'd. Need (Tons) | Available Stocks (Tons) |
|-------------------------|-----------------------|------------------------------------|
| Emergency Appeal | 836,800 | 77,101 (DPPC/NGO Carry-over) |
| Internally Displaced | 62,549 | 13,158 |
| Refugees (Estd.) | 60,000 | 22,000 |
| EFSRA Stock (01/26/00) | | 104,209 |
| Sub Total: | 959,349 | 216,468 |
| Balance: | 742,881 | |
| EFSRA Loan Repayments | 213,347 | (Outstanding loans as at 01/26/00) |
| Max. Local Purchase | 110,000 | (Would take 9 months to procure) |
| Min import requirement: | 846,228 | |

- 3.1.3 The US Government has pledged to the DPPC's appeal 90,000 tons as part of CY1999 allocations. This amount has been carried forward to CY2000 and may arrive between April and May. Informal indications suggest that donors are likely to pledge a total of about 400,000 tons against the DPPC appeal. While this response will be welcomed, it falls short of minimum CY2000 import needs by 50%. However, once the status of the belg harvest is known, donors may if necessary increase the size of their pledges.
- 3.1.4 The timing of the relief food arrivals is critical if peak needs through April, May and June are to be met. (See graph below). In particular, it will be crucial to supply sufficient stocks to ensure that food can be pre-positioned before the onset

of the main mehr rains that restrict access to remote areas between July and September. Donors should therefore make every effort possible to procure and ship food consignments between February and May. While large pledges are important, timely, well-planned and executed deliveries of smaller consignments are essential. For example, the US Government food aid pledges would have most impact if say 120,000 tons was shipped before June in batches of 30,000 tons.

Estimated Relief Food Needs for CY2000

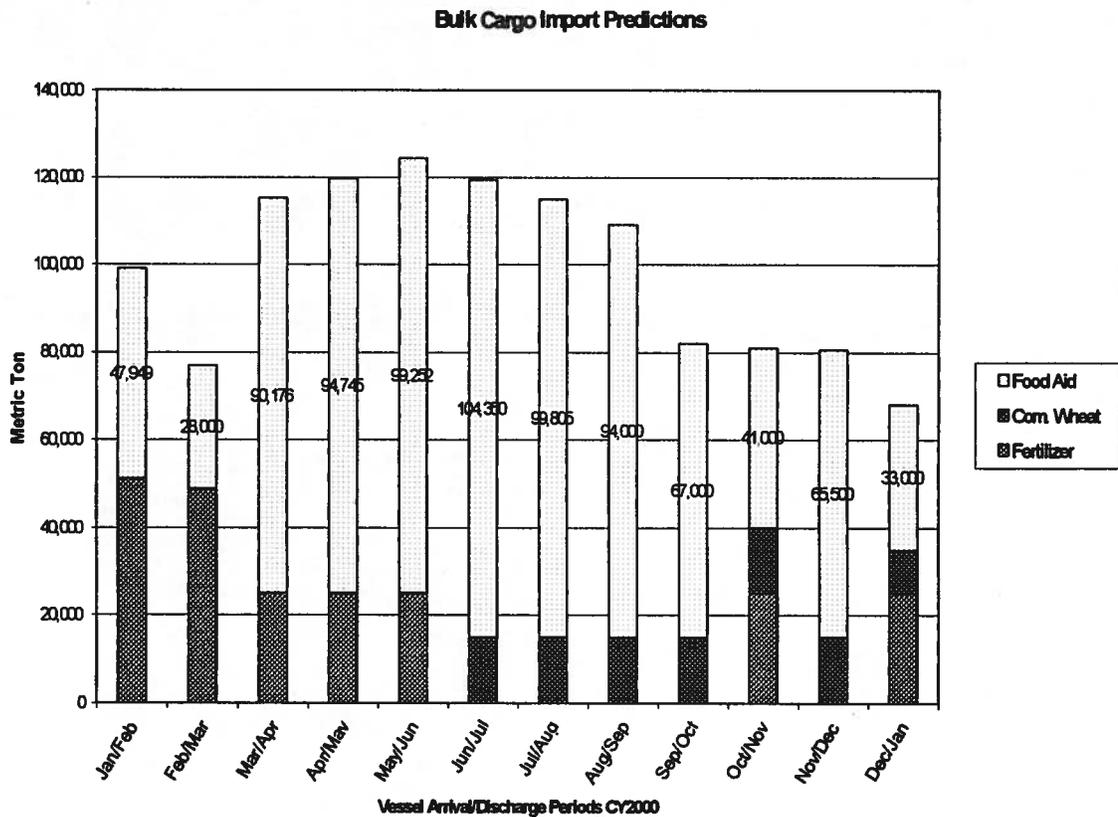


- 3.1.5 The Ethiopian agricultural season runs from September to October. The National Fertilizer Industry Agency (NFIA), has indicated that during this period a total of 175,000 tons of fertilizer will be imported with possibly an additional 50,000 tons being imported at the end of 2000. During CY1999 323,176 tons of fertilizer was imported. Historically, fertilizer imports can be as high as 400,000 tons if sufficient foreign exchange is available. Due to carry over stock from 1998 and low utilization⁴ of fertilizer, approximately 200,000 tons has been carried over to this year.
- 3.1.6 Furthermore, some commercial importers, have suspended their fertilizer imports for the next 2 years because of what they view as unfair competition from party-affiliated companies. They cite the placement of difficult tender criteria and bureaucratic problems. The main fertilizer importers are now Guna, AISCo, Dinsho and Ambassel. If market conditions were better then commercial imports of fertilizer would have been much greater. Instead, due to current low prices, stocks are being sold.
- 3.1.7 Commercial wheat is historically imported between August and November when in-country supplies are low prior to the harvest. At this time, it is difficult to predict exactly how much commercial wheat will be imported. Given the present

⁴ Farmer's were reluctant to use fertilizer due to difficulties with the provision of credit and because rain patterns were uncertain.

situation, it is unclear why import taxes on cereal imports could be as high as 29% when an acceptable rate, in order to promote importation, would be in the region of 5%. Perhaps based on this problem, there is some uncertainty as to whether the East African Trading House will go ahead with its planned import in February of 15,000 tons of wheat. However, based on 1999 imports of 79,340 tons, it is likely that a similar amount will be imported in CY2000.

- 3.1.8 The sea-freight of salt to Djibouti for Ethiopia may stop this year because agreement has been reached, due to price reductions, for Ethiopia to import Djiboutian salt.
- 3.1.9 Currently there is no coordination among importers of break-bulk cargo. It is estimated that 50-60% of commercial imports are made purely on speculation. Under normal conditions, commercial imports could be as high as 1.5 million tons but due to the conflict with Eritrea, increased import taxes and higher fuel prices it is more likely that such imports will be similar to those of 1999 (about 800,000 tons).



- 3.1.10 The graph above represents the possible import pattern of bulk cargo (excluding break-bulk cargo) amounting to 1.2 million tons (225,000 tons fertilizer, 100,000 tons commercial wheat and 850,000 tons of food aid). Cargo tonnages to September are based on WFP's recent shipping bulletins (with some revision based on recent information and the need to bring forward shipments to

February and March). New food pledges of 400,000 tons have been spread over the months of February to December – based on need. The graph demonstrates how import plans could be adopted to ensure that both new pledges and shipments already committed could be imported to ensure that total monthly imports between March and August do not exceed 125,000 tons.

- 3.1.11 While the sustained discharge and off-take of over 90,000 tons of food aid (over 100,000 tons of bulk cargo) per month between February and July will certainly be a challenge, from experience in 1999 it is possible to achieve this target. However, if all bulk cargo during this period is imported through Djibouti, it is possible that the off-take and transport of commercial goods will be affected due to insufficient numbers of trucks. The port of Berbera will therefore also need to be used.
- 3.1.12 In order to ensure that vessel arrivals, berthing and discharge rates are planned well in advance it is vital that all importers of bulk cargo coordinate at a technical level on a very regular basis from now onwards. Additionally, coordination over the use of transport resources will be essential. If shipments are delayed and not properly spaced and if truck fleets are not adequately coordinated, Djibouti will definitely become congested.
- 3.1.13 It should be noted that if the above scenario can be achieved, there will be leeway to allow for additional food imports after July should beneficiary numbers and relief food requirements increase.

3.2 *Food Import and Distribution Constraints*

- 3.2.1 Since the start of the conflict with Eritrea, increased truck traffic has not only put pressure on the facilities at Djibouti, but has also put significant strain on available transport capacity. Furthermore, peak demands and the imbalances of cargo in the road transport sector are not coordinated adequately. The main bottleneck appears to be poor coordination between food aid and fertilizer importers. These weaknesses are exacerbated by a weak clearing and forwarding sector in Ethiopia. The scheduling of transport continues to be a serious problem during peak periods of demand.
- 3.2.2 Under current arrangements, trucks at the port can load either directly from vessels, from port storage or from town stores. While direct delivery operations, compared to shore handling, are preferred due to the relatively low cost this method implies that sufficient numbers of trucks are available. It also implies that the turn around of vehicles at destination is properly coordinated to ensure that trucks return to port promptly for loading. The vessel must be able to discharge all its cargo before the demurrage period starts (typically 22 days). Demurrage costs can be between \$18,000 and \$25,000 per day for a 30,000 ton vessel.
- 3.2.3 For a consignment of 30,000 tons to be discharged by direct delivery within 22 days there will be a need for a minimum off-take of 1,364 tons per day – requiring 39 35-ton trucks per day. Assuming an average turn around time of 6 days at least 234 vehicles will be required. However, assuming that sufficient

bagging machines are available, large vessels with efficient cranes and grabs can discharge between 2,500 to 3,500 tons per day – sometimes more. Therefore in order to meet this discharge rate, 72 trucks per day or a fleet of about 432 trucks per vessel discharging will be required.

- 3.2.4** The port of Djibouti now has 19 bagging machines and, with planned improvements, will shortly have the capacity to berth and discharge three large bulk vessels at the same time. This being the case, the number of trucks⁵ available for delivery operations will not be sufficient to meet sustained demand. Already poor management of peak demands has delayed the discharge of large vessels (with efficient gear) and has caused a back-log of vessels waiting at anchor. See WFP's case study of the MV/Mathios attached as appendix 4.
- 3.2.5** In order to avoid delays and the bunched arrival of vessels at Djibouti, at least 5 vessels per month will need to be discharged at peak periods this year. There will therefore be no alternative but to use both direct delivery and shore handling methods as adopted by the WFP/FATS operation, which has been functioning exceptionally well recently. (See recent FATS report at appendix 5). It should be recognized, however, that fertilizer and usually commercial wheat shipments will not discharge to shore. They will only discharge through direct delivery as import budgets (which are linked to their letters of credit) will not permit otherwise. There is therefore a danger that the discharge and transport of food aid will be affected. In order to avoid this scenario, close collaboration and coordination between fertilizer and food aid importers will be required throughout the year.
- 3.2.6** Although customs clearance procedures for aid cargo have been streamlined, bottlenecks still exist for commercial cargo where procedures are slow. Some companies contacted complain that the recent re-emergence of SGS, which inspects consignments, has increased costs and bureaucratic delays. As a result, truck turn around time is often affected, as is the time cargo lies in port storage waiting for collection. NB. Significant numbers of trucks travel to Djibouti without formal contracts (as was the practice when Assab was open) in order to find cargo to transport. These trucks often wait several days to collect commercial cargo. Furthermore, Djibouti still is not operating its general cargo terminal on 24-hour shift. Transport resources are therefore not being properly utilized.
- 3.2.7** The road network within both Djibouti and Ethiopia is in a poor state of repair. Reportedly, this has recently increased the truck travel times between Djibouti and Gelafi. (See chart at appendix 6 indicating loaded truck travel times to/from major hubs). While road improvements are under way, such work is frequently inadequate as road authority capacity is limited.
- 3.2.8** The port of Berbera will play an important role this year. However there is a need for at least three bagging machines so that bulk shipments can be discharged. There is also a need to improve transport efficiency by completing urgently the bridge repair work that has been started within Somaliland. In doing so, trucks

⁵ Over 50% of Ethiopia's entire long-haul fleet operating on the Djibouti corridor would be required. Therefore in-country transport needs would not be met.

with trailers could, if necessary, be used. Road conditions may be affected by rain during the month of April, so it will be essential for the sector of road between Somaliland and Jijiga to be upgraded.

- 3.2.9 If Berbera is to be used for prolonged periods, there will be a need to provide additional facilities for drivers as well as communications en-route to Dire Dawa. Currently, facilities are limited. Furthermore, fuel supplies in or around Jijiga are sometimes scarce and security problems between Jijiga and Harar prevail. Therefore, truck turn around time could be affected.
- 3.2.10 According to Lloyds Insurance "War Rating Committee" Somalia is still considered a war zone. The committee decides and advises changes of insurance rates and conditions of cover for the world's air and marine ports. Marine insurance would be required to cover: war, strike, riots and civil commotion. Vessels calling at the port of Berbera should have war risk insurance which is presently set at a rating of 0.1% of value of cargo and 0.1% for hull/vessel insurance. The hull underwriters for US vessels would usually be American so would be cautious about insuring vessels bound for Berbera and may well insist on war cover thus making shipping expensive.
- 3.2.11 Additionally, if Berbera is to be used to import up to 20,000 tons per month – as is its capacity – there will be a need to ensure that sufficient storage capacity exists in or near Dire Dawa to receive the food. This is because Somali trucks cannot travel beyond this point (Ethiopian trucks are unlikely to be used). However, as Berbera has significant storage capacity, food aid could, if necessary, be stored there if more warehouses were refurbished.
- 3.2.12 Storage capacity within other areas of Ethiopia has also been cited as a potential problem. However, sufficient numbers of stores are available to ensure that, with proper planning, food storage should not be difficult. For example, the Ethiopian Oil Seeds & Pulses Export Corporation (EOPEC) – now under EGTE – is not handling/exporting much volume at the moment so their stores are available. The EFSRA and other stores should be used primarily for transit. Therefore issues from the stores should match receipts. However, the EFSRA has experienced problems in the past whereby loans have not been withdrawn in a timely manner.
- 3.2.13 Although each EFSRA depot can off-load between 75 and 100 trucks per day bottlenecks are sometimes evident when weighbridges are used. For example, trucks have to be weighed twice (when loaded and then unloaded). In Nazareth as there is only one weighbridge some distance away from the FSR stores, trucks are frequently delayed for several hours (sometimes days) at peak periods waiting to be weighed. Recently also, at Mekele the weighbridge could not be used due to electrical problems. This caused serious truck turn around delays.

3.3 National Logistics Master Plan – Summary

- 3.3.1 The absence of a comprehensive Transport and Logistics Master-plan has been a constraint to the DPPC's Logistics & Transport Coordination Department's ability

to efficiently coordinate both the resources and actors involved in the procurement and delivery of relief food.

- 3.3.2** Throughout the 1990's the management and co-ordination of national transport and logistics capacity has been in a state of flux. In 1994 the World Food Program Transport Operation for Ethiopia (WTOE) was dismantled and the trucks handed over to the DPPC. In 1996 the Government began to implement a policy to privatize all of the other relief transport fleets that had been established in the 1980s. This included the truck fleets that belonged to the DPPC and NGOs. At the same time, the aim was to form a semi-independent Strategic Relief Fleet (SRF) using part of the fleet of four-wheel drive trucks operated at that time by the GTZ-managed Transport Operation for Refugees (TOR). This entailed a shift in the role of the DPPC and in particular the Logistics and Transport Coordination Department (LTCD) from that of an implementation unit to one of coordination.
- 3.3.3** The implementation of the National Policy for Disaster Prevention and Management (NPDPM) entailed changes for transport and logistics regarding the planning, implementation, monitoring and evaluation of operations. Although other aspects of the NPDPM were clarified in the "Guidelines for Implementation of the National Policy for Disaster Prevention and Management", the document did not explicitly address the issue of transport and logistics. Issues of coordination also needed to be clarified for donors, NGOs, bilateral organizations and the DPPC. Therefore, to provide such guidelines and also to assist the LTCD to redefine its responsibilities a Transport and Logistics Master Plan (TLMP) was proposed by the DPPC.
- 3.3.4** At the time, the German Government through GTZ was providing management assistance to the DPPC/LTCD. In late 1996, GTZ commissioned a study of emergency transport and logistics operations and in early 1997 sponsored a short series of seminars to discuss the formulation of a national TLMP. Participants included transport and logistics professionals and all members of the Government-led Multi-Agency Technical Task Force (MATTF) working group.
- 3.3.5** While GTZ and the DPPC/LTCD had carried out the preliminary phases in the development of the TLMP, agreement was then reached for the final phase to be managed jointly by the European Union and LTCD. To this end, the EU earmarked funds for the provision of technical assistance to the 1996/97 EC Food Security and Food Aid Program for Ethiopia. Such assistance would not only provide inputs to complete the development of the TLMP but also on employment generation schemes (EGS) and early warning information and communication systems.
- 3.3.6** Following a delay of over a year, in October 1998 the European Commission in collaboration with the Ministry of Economic Development and Cooperation (MEDAC) issued a letter of invitation to international consulting firms to tender for the implementation of a program of technical assistance to the DPPC. The main aim being to develop a TLMP. Unfortunately, the technical assistance program has yet to begin.

4. Contracting

- 4.1** The use of the "Through Bill of Lading" (TBL) has been the subject of much discussion over the past year or two. This contracting method operates whereby the consignee's cargo is shipped from point of origin to final inland destination. In this case, the shipper is responsible for inland transport matters. One problem with this method is that normally only one [Ethiopian] transport company is used. In this case the numbers of trucks provided for vessel discharge are often insufficient. In almost every case when a TBL is used, discharge is via direct delivery. For example, fertilizer discharging is frequently a problem as suppliers always use through bills of lading. Vessels sometimes end up being used as storage for several days.
- 4.2** Fertilizer importers cite Djibouti's \$6.0 per ton shore handling fee if cargo is landed. They say that it is usually cheaper to put their vessels to anchor than to pay landing fees and store cargo in the port. If this handling charge was lower then they may reconsider using both direct delivery and shore handling systems.
- 4.3** Of more concern, however, is the use by donors of the TBL system without adequate coordination with their country offices or the final consignees. For example, USAID/USDA has frequently awarded contracts to a US-based company, Waterman, which operates lash-barge vessels on a liner (scheduled) basis. Apparently Waterman often seem to win tenders as, through their affiliated company in Djibouti, Kothari, they undercut the competition. Kothari obviously quote low stevedoring and transport rates which, as has transpired, are frequently below market rates during peak periods. Arguments with operatives ensue and the handling of cargo is sometimes significantly disrupted. Cargo has also been damaged.
- 4.4** In October 1999, several PVOs were consignees for a large shipment of cereal and vegetable oil. Before discharge from the barges, it was discovered that the cereal was infested and although the agent fumigated the food in situ, this did not stop the infestation. As Kothari had not budgeted to land the cargo, it could not be properly fumigated. The food was finally discharged by direct delivery, but has remained spoiled.
- 4.5** For emergency food assistance, USAID normally ships consignments on a CIF basis using the port of discharge as initial point of destination. Due to USG regulations, consignees (usually PVO) must pay for all inland transport and then claim reimbursement from the donor. This places significant cash-flow constraints on the consignee. In the past, USAID would open a line of credit against which the consignee could draw funds. Payments made were then audited. The receipt of cargo under CIF arrangements is significantly cheaper (reportedly up to 40% less, if handled by PVOs) than the TBL system and gives consignees much better control over discharge and transport to final destinations. Due to the change in USG regulations, PVO/NGOs are often financially unable to use this system and therefore, in spite of the disadvantages, request to receive food aid under the TBL system.

- 4.6 There is generally a lack of understanding among in-country donor offices and consignees as to the intricacies of shipping contracts. Improvements in the understanding of the overall process of shipping bulk cargo would result in better coordination of activities. Below is a very simplified version of the two main contract systems used:
- 4.7 Free-out operation: 'Free' means free to the account of the ship owner who is not responsible for discharge operations. In this case the vessel charter party (donor or consignee) is responsible. The charter party has to hire a stevedore to do discharge cargo. Any losses after ships rail become the responsibility of the stevedore. For example, if the stevedore lost grain then value of this is deducted from payments to them from Charter party.

Charges for 'Free-out [bagged] up to free-on-truck' would include:

- Stevedoring – free-out [bulk] approximately \$4/ton
- Mechanical bagging (starts when grab opened above bagging machine) approximately \$7/ton to end of bagging line
- Loading on trucks approximately \$4/ton (to pick up bags from conveyor and stack on trucks)
- Customs clearance and other port charges.

This type of contract does not normally include the supply of trucks for CIF operations.

- 4.8 Liner-out [bagged]: The liner (ship or ship's owner) is responsible for discharge. For 'Liner-out [bagged] up to free-on-truck', the contract charges would include stacking on trucks. If no trucks are available then the ship's demurrage becomes the responsibility of receiver.

Liner-out contracts are not normally used for bulk carriers. The contract system applies normally to the use of barges. If the receiver cannot provide trucks then cargo is either put to port storage or will remain on the barges.

- 4.9 WFP uses the Free-Out contract system under its FATS operation. For example, a charter-party contract for 15,000-ton vessel would stipulate a discharge rate of say 1,500 tons/day. Therefore the duration of discharge is 10 days from submission by the vessel of 'notice of readiness to berth and discharge'. WFP contracts a stevedore in Djibouti (or Berbera) to discharge the vessel.
- If berthing and discharge is done say in 7 days then the ships owner pays the charter party "dispatch money" which is equivalent to 50% of vessels daily demurrage charge. ('D half D' specified in contract).
 - WFP will then give the dispatch money to the contracted stevedore as an incentive to discharge the vessel quickly. However, if they do not perform then they must pay (or have deducted from their fees) any demurrage costs. Thus they have a significant incentive to discharge the vessel very quickly.

- 4.10 The WFP/FATS operation therefore has significant leverage over vessel discharge, controls the operations of 500 trucks, has port and town storage facilities and has significant funds to pay for these resources. They can also utilize up to fifty 25-ton rail wagons per day to Dire Dawa and a coordination office in Djibouti. They have therefore been able recently to hit record vessel discharge rates⁶.
- 4.11 In an ideal situation, both Ethiopian and Djiboutian freight forwarding companies should be contracted to undertake the discharge and transport of all aid cargo. Indeed the financial incentives for them to do so are significant. However, until the freight forwarding sector has developed further and both formal and informal bureaucratic obstacles are reduced or removed, they will not have the capacity to achieve what is achievable under the WFP/FATS system.
- 4.12 The contracting of transporters is also of concern. Rates (see appendix 7) can change almost on a daily basis at peak periods and commercial importers will pay premiums in order to get trucks. Transporters don't always honor their contracts and will frequently abandon a contract in favor of a higher offer. Transport companies are often reluctant to sign contracts that include penalties and avoid, or are financially unable, to enter into contracts requiring performance bonds⁷. Although it is agreed that it should be the responsibility of importers to sort out the management of truckers, this is not an easy task as the Ethiopian road transport sector is still evolving. Party-affiliated companies are also still dominant and a true free market atmosphere is yet to fully develop.
- 4.13 Trucker 'performance bonds' do not tend to work as they cannot be enforced. There is still too much leeway in determining what constitutes good or bad performance and too many 'external factors' tend to be used as excuses for delay. Also, the judicial system is such that court cases take months or years to sort out. The only way to enforce compliance with contracts is to blacklist operators for non-performance. However, although in the case of WFP/FATS this is a significant incentive to work reliably, in the case of smaller importers it is not.
- 4.14 There appears to be a lack of understanding (or willingness to understand) within the GFDRE regarding these problems. The Government is seen to negotiate on behalf of commercial operators and there is concern that the present situation works against the development of a market-driven economy. Contrary to earlier directives, an article in Capital newspaper (12/20/99) indicates that Government departments now do not need to tender for goods or services if there is another Government department that can provide these. Although Ethiopian freight forwarders are now able to deal with organizations or partners in Djibouti this directive undermines them.

⁶ In January 2000, a 27,280-ton vessel was discharged in 8 days at an average rate of 3,404 tons per day (which peaked at 5,363 tons in one day).

⁷ In 1999 the Ministry of Finance issued a directive to all Government departments stipulating that performance bonds were required for all tenders. This had the effect of significantly reducing the number of truck operators that could tender for work with the DPPC.

5. Surge capacity

- 5.1** In terms of resources, the available surge capacity within the road transport sector is very limited. However, should beneficiary numbers increase significantly later this year, and therefore the amount of food imported, a number of coordination mechanisms could be used.
- 5.2** Of greatest concern in the past has been Government intervention, whereby 'coordination' becomes 'control'. Essentially, this means that trucks are forcibly diverted to the port or major points of congestion. Furthermore, rates can be fixed and trucks can be used under a first-come first-serve basis at the port. Fortunately, the GFDRE uses this option as a last resort but the option remains a potentially effective means to meet emergency needs.
- 5.3** In the 1980s the Ethiopian Freight Transport Corporation (EFTC) established a semi-trailer relay station at a place known as Adaitu, which is located 45 kms south of the Mile junction. Although facilities were/are extremely limited, it is understood that Adaitu could be used as a "dry port". Last year when large volumes of cargo were expected, the GFDRE instructed consignees to use Adaitu as a transit hub. At the time, however, it was not made clear how the site could be used and there was concern that no storage facilities were available there.
- 5.4** Although Adaitu was never used, either that location or compounds at Mile, which may be a more suitable location, could be used as a semi-trailer relay point. Truck-power units towing semi-trailers could be more fully utilized to move grain from the port to the relay site. In doing so, the truck turn around time could be reduced by half, thus increasing by 50% the number of truck/semi-trailers available to load at the port.
- 5.5** The current power to semi-trailer unit ratio is 1:1. For example, in the privatized EFTC enterprises, such units are completely inflexible. Truck/semi-trailers are presumed to be no more than one truck when in fact at least two semi-trailers should be available to each power unit. With the addition of semi-trailers to a fleet, creating a ratio of at least 1:2 or say 200 semi-trailers to 100 tractors, trailer pools can be established. This would allow power units to continue to operate while cargo on parked semi-trailers is trans-loaded onto truck-trailer units or short-haul trucks, which would then make deliveries to final destinations.
- 5.6** This system would have the advantage not only of increasing the number of trucks available to load at port, but also would significantly reduce the need for storage. When a load arrives at the relay site, the unit would be inspected and the trailer dropped in the yard to be unloaded. The tractor would then be hooked to an unloaded trailer and dispatched back to the port immediately. The inbound trailer would then become part of the terminal (dry port) trailer pool. The other advantage to this system is that port handling costs would be reduced because all cargo could be discharged by direct delivery. Trailer trans-loading costs would be about \$2.0/ton as opposed to \$6.0/ton port handling charges.

- 5.7 It is estimated that while there are about 400 power units in operation, there are a large number of un-used semi-trailers available in Addis Ababa and Nazareth. Table 5.1 indicates the total number both in use and not used, that could be obtained.

Table 5.1 – Number of Semi-Trailers

| Company | Qty |
|------------|-------|
| Comet | 120 |
| Noah | 170 |
| Tarig | 60 |
| Abissinian | 170 |
| Shebelle | 200 |
| Bekelcha | 200 |
| TESCo | 200 |
| | 1,120 |

- 5.8 The disadvantages to the system is that it would require immense coordination and a commitment on the part of the major operators to use only truck/semi-trailers from the port to Adaitu/Mile and all other trucks on the secondary routes from the dry port. Contracting would also be problematic. All in all, the system would only be viable if transport resources were fully controlled (see 5.2 above) under a full-scale emergency operation.
- 5.9 Other options explored in the past in order to increase truck capacity have included bringing in foreign trucks. This has proven both expensive and has met with considerable opposition from local operators. A more viable option therefore is to optimize cargo flows at the ports.
- 5.10 In addition to WFP's Special Operations Plan to help improve the Djibouti port bulk terminal area, three other alternatives are currently being planned. These are:
- i. To increase the use of the port of Berbera. This includes providing bagging machines and opening a WFP coordination office there.
 - ii. To establish, during the peak cargo arrival period, a bulk vessel lightering operation at anchorage in Djibouti. A small vessel would be chartered for several months and would be used to discharge and bag cargo from larger vessels. Bags would then be loaded onto barges and discharged at the general cargo terminals. WFP is currently checking the costs of doing this but the advantage would be that an extra (floating) berth would be created and cargo would be landed only when trucks were available.
 - iii. To use Port Sudan for both trans-shipment⁸ and as an off-take point for trucks bound for north-western Ethiopia. It is understood that a trial shipment of cargo may soon be discharged in Sudan and overland transport arranged to Gonder via Gedaref. The disadvantage to using Port Sudan for trans-shipments is that it would be about \$20/ton more expensive than using the vessel lightering system in Djibouti. While road transport operations may be feasible, unless the road links to Ethiopia are significantly improved quickly

⁸ Port Sudan can store up to 1.0 million tons of bulk cargo.

it will not be possible to transport cargo between the months of May and September due to rain.

- 5.11 In order to speed up the shipment to Ethiopia of relief supplies donors have in the past facilitated the block chartering of vessels to shuttle food aid from European and other ports. This in fact was the case during the 1984 famine when Band-Aid funded the chartering of a vessel that was dedicated to shipping relief food to Ethiopia and Sudan. If ship scheduling became a problem in CY2000, this option could be used to meet a surge in emergency food demand.**

6. Conclusions & Recommendations – An Action Plan

- 6.1** The findings from this port clearly indicate that essentially three mechanisms should be adopted in order to ensure that relief food is imported and delivered to beneficiaries in the right quantities and at the right time. These are:
- i.** Better technical understanding and coordination of shipping;
 - ii.** Improved contracting procedures, and;
 - iii.** Temporary use of a dedicated food aid transport system.
- 6.2** However, the overriding requirement is for donors to schedule the shipments of all pledges as urgently as possible. Failure to ensure that food aid is shipped immediately, may result in significant port congestion and transport utilization problems which will adversely affect beneficiary relief operations.
- 6.3** The most expedient method of ensuring that all relief food is coordinated, handled and delivered effectively is to use a mechanism similar to the WFP's Food Aid Transport System (FATS). Thus, although expensive, a "one-stop shop" alternative would be possible if donors were to permit consignees to use such a system, during peak demand periods, without having to tender with commercial operatives.
- 6.4** Performance based contracts should be used when importing cargo under a Through Bill of Lading (TBL). Such contracts should clearly indicate that penalties will be payable to the donors/consignees if operatives do not deliver aid cargo in good condition according to an agreed time-scale.
- 6.5** In the past donors have paid any demurrage costs. As a significant incentive for receivers to clear, discharge and transport their consignments on "Free-Out" basis (see 4.7 above), bi-lateral agreements should state that any demurrage costs will be the responsibility of the receivers. Additionally, donors could permit "dispatch money" to be given to the receiver (or their agent) in the case of good performance.
- 6.6** Donor and aid organization representation in Djibouti should be improved so that shipping and transport contracts can be monitored effectively.
- 6.7** The Transport and Logistics Department (LTCD) of the DPPC should be encouraged to re-open the Relief Transport Coordination Center (RTCC), which was originally established in 1992 to improve port operations. The main task of the new RTCC should be:
- To improve the level of technical understanding and coordination between not only consignee aid organizations, but also importers of fertilizer and other bulk cargo;
 - To plan, as accurately as possible, the arrival and discharge of vessels. coordination re shipping. For example, which agents used, vessel draft, gear used, discharge capacity, timings etc.;

- To plan the utilization of transport resources in order to ensure that port off-take is maximized;
- To facilitate the effective utilization of EFSRA and other warehouses as transit points;
- To discuss other operational issues as necessary.

It is envisaged that the RTCC meetings will be designed to supplement the existing WFP shipping meetings and should be attended by a small group of technical coordinators with decision-making authority. An off-shoot from the meetings would be the dissemination of relevant technical shipping and transport information that could help others to plan.

It would be the primary responsibility of the DPPC/LTCD and NGOs to plan and facilitate secondary transport and relief food deliveries to beneficiaries.

6.8 Regardless as to whether the DPPC/LTCD is willing to take on a chairmanship role for the RTCC, logistics support information systems will need to be enhanced – for which funding will be required. Information systems could include:

- ◆ Updating the warehouse information database held by UNDP-EUE and the EU. Each entry should be geo-referenced to allow the information to be linked to a GIS system, along with major stock data. Information on permits issued by the Ministry of Trade and Industry to private warehouse operators should be used to trace and include these facilities in the database. Half yearly updates of such a database should be distributed to organizations involved in logistics planning.
- ◆ The database of warehouses proposed above could be expanded to include weekly stock levels and ideally linked to a GIS for geographical analysis. Stock data flow could be facilitated by the establishment of formal data transfer mechanisms between concerned organizations and the use of electronic data transfer for all of the major warehouses.
- ◆ The Logistics Information Tracking System (LITS) that was set up by UNDP/EUE in 1993/94 and run by the DPPC/LTCD was primarily concerned with the tracking of food aid consignments from arrival in Assab to delivery point. Data was transferred by modem from the DPPC port office and imported into an Access database in Addis Ababa. Port dispatch data sent included a record for each truck leaving Assab with food aid and non food aid or fertilizer. Each record gave details of the consignee, cargo, quantity, primary destination, transporter, waybill and truck license plate. Data analysis was able to determine which consignee each transport company was working for and therefore whether a particular company was over-stretching itself. Remedial action could then be taken. Weekly and monthly reports were output. Consideration should be given to re-establishing the LITS database in Djibouti.

6.9 As the port of Berbera will play an important role this year there is a need for at least three bagging machines so that bulk shipments can be discharged. There is

also a need to improve transport efficiency by completing urgently the bridge repair work that has been started within Somaliland. Road conditions may be affected by rain during the month of April, so it will be essential for the sector of road between Somaliland and Jijiga to be upgraded. Although the Danish Government may provide funds to upgrade the road link between Somaliland and Ethiopia, additional inputs should be provided, where necessary, to assist with these and other improvements.

- 6.10 Additionally, if Berbera is to be used to import up to 20,000 tons per month there will be a need to ensure that sufficient storage capacity exists in or near Dire Dawa to receive the food. As stocks in Dire Dawa/Shinile are currently high, donors should consider providing extra transport funds to encourage the movement of this food as soon as possible to the Amhara and Tigray regions.
- 6.11 The EFSRA has experienced problems in the past whereby loans have not been withdrawn in a timely manner. The EFSRA and other stores should be used primarily for transit and therefore aid organizations must be encouraged withdraw loans as quickly as possible.
- 6.12 The vehicle registration system at the RTA seems adequate for primary logistics information requirements. However, the problem is the lack of vehicle data from the regional bureaus. A donor project to computerize and capacity build in these regional offices may help matters in this respect.

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