

Issue Paper

MMTA Project



منظمة دارفور للتنمية وإعادة التعمير
DARFUR DEVELOPMENT AND RECONSTRUCTION AGENCY

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Introduction

Recent completion of the El Ingaz paved road, connecting Darfur to Central Sudan and improving communications between Darfur's state capitals, has had a major impact on trade into, out of, and between Darfur states. This short paper is an attempt to capture some of that impact and to identify associated economic opportunities for Darfur. Completion of the El Ingaz road has come at a time when there is greater stability in many parts of Darfur than for a number of years since the conflict began in 2003.



Photo: El Ingaz road: Wadi Azoom – road and bridge construction

This paper is based on regular data collection by Darfur Development and Reconstruction Agency's (DDRA) Market Monitoring and Trade Analysis (MMTA) project, across all five Darfur states. This has been supplemented with additional data collected specifically for the paper by MMTA staff, from interviews with government planning and trade units within the respective state governments, the Chambers of Commerce at state level, transporters, and managers of large-scale food companies now operating in Darfur. Constraints faced in collecting relevant information include lack of official data on the impact of the road and on livelihoods. Also, construction of parts of the road has been ongoing since 1995, which means that it is challenging to clarify the 'before' and 'after' impact in different seasons – the dry and rainy seasons.

Background to the El Ingaz Road

Construction of a paved road connecting Darfur to Central Sudan was identified in 1989 as the single most important intervention to contribute to improved food security in Darfur¹. Construction of the road began in 1995 and took until November 2014 for the Omdurman/El Fashir, El Fashir/Nyala and Nyala/El Geneina sectors to be completed. Paving of the road is still ongoing for some sectors within Darfur, including the sector between El Fashir and Manawashi, a distance of around 100 km on the El Fashir to Nyala road, and between Kass and Zalingei. This latter sector had been paved in the 1980s but subsequently deteriorated to a very poor condition; it is now due to be upgraded. The El Ingaz Road is a vital artery connecting the five states in Darfur to Central Sudan, and to each other (although it should be noted that the El Nahood to Ed Daien road, connecting East Darfur to Central Sudan has not been paved).

Construction of the El Ingaz Road has contributed to much improved security for transportation of both goods and people. This is due to three main factors: trucks moving fast and frequently along the paved road which are therefore less vulnerable to being held up, the construction of police stations around the main towns, and improved mobile phone communications.

1. See the 'Report on Darfur Region Food Security Policy and Planning' by Jeremy Swift and John Gray, for Darfur Regional Government

North Darfur

North Darfur is the first state that the El Ingaz Road enters from Central Sudan. When construction of the paved road reached El Fashir it triggered some key changes as a result of improvements to trade flows, security and the economy.

Transportation costs have fallen. Before completion of the paved road, transportation costs from Omdurman to El Fashir were approximately SDG 600 per tonne; after completion of the El Ingaz Road, transportation costs decreased by 25%, to approximately SDG 450 per tonne. See Table 1. The price of cement (from Atbara) in El Fashir market fell by almost 20%, from SDG 2400 per tonne to SDG 1940 per tonne by September 2016. The reduction in travel time between Central Sudan and El Fashir has thus reduced transportation costs and has had a knock-on effect on the price and availability of many commodities. The number of trucks travelling between Central Sudan and El Fashir has increased substantially. It is estimated that there are now 25 to 30 trucks travelling this route per day, sometimes rising to over 50 trucks per day. They no longer travel in convoy as security has improved. Before, there were one to two convoys per month, with 100 or more trucks in each convoy.

There are many economic consequences of this improved and more secure transportation, some of which contribute to more resilient livelihoods:

- 1) More stable and improved supply of commodities from Khartoum and Omdurman, such as sugar, flour and medicines. This has resulted in more stable prices for consumers in North Darfur, especially in El Fashir. There is also improved availability of some fresh produce in El Fashir, including fresh fish and fresh milk products supplied from Central Sudan.
- 2) Large companies from Central Sudan have now set up their own distribution channels in El Fashir – see Box 1. This (plus reduced transportation costs) has helped to push prices down, benefiting consumers although some small traders who used to transport and sell these goods in North Darfur may have lost out.
- 3) The livestock trade from Darfur to Central Sudan has been given a boost. Livestock can now be easily transported by large trucks from El Fashir to Omdurman, taking one to two days instead of being trekked on the hoof over a distance of 1000km. This has encouraged and enabled larger livestock traders from Omdurman to come and buy from North Darfur's livestock markets and has boosted the volume of live stock traded, especially sheep. This benefits rural areas beyond El Fashir. For example sheep are trekked from Dar Zaghawa to El Fashir on the hoof, and are then transported by truck to Omdurman. This has also boosted the cross-border sheep trade between Chad and Dar Zaghawa.
- 4) The road has boosted the agricultural sector more generally, connecting production areas in North Darfur with markets in Central Sudan, for example for gum Arabic, hibiscus, vegetables such as onions and tomatoes, and even small quantities of alfalfa for livestock fodder.

Box 1: Large companies from Central Sudan, now registered in North Darfur and supplying El Fashir market

- Dal industry group (producing food commodities)
- Moawia Elbereer Groups (producing processed food)
- Seen (flour mills)
- Abou Hamama (flour mills)
- Alwabil company (food products)
- Kondai (medical services)
- Atbara Company (cement)

5) Completion of the El Ingaz road has had some impact in boosting the cross-border trade in small cars between Libya, El Fashir and Central Sudan. Initially illegal, this trade has now been legalized and a customs point established in El Fashir in 2016.

Thus, some of the trade and economic benefits of the El Ingaz road are not restricted to El Fashir but have benefited other parts of North Darfur as well, and have triggered changes in some trade routes. It is now quicker to travel to Malha, for example, through Umm Keddada rather than through North Kordofan as before.

Transportation costs from Khartoum to El Fashir are higher than the reverse direction, from El Fashir to Khartoum. Before the El Ingaz Road the prices per tonne, in the dry season were SDG 600 (Khartoum to El Fashir) and SDG 400 (El Fashir to Khartoum). After the paved road the costs decreased to SDG 450 and SDG 300 per tonne respectively. This is due to the larger volume of trade from Central Sudan to North Darfur than in the opposite direction, indicating the potential to increase trade flows in Darfur's agricultural commodities back to Central Sudan.

Completion of the El Ingaz road has benefited passengers as well. Those traveling on small buses from locations in North Darfur to El Fashir can now transfer to larger buses at El Fashir's new bus station to travel to Khartoum. As bus fares have fallen compared with air fares, this has encouraged larger flows of people to travel between North Darfur and Central Sudan, including students, those seeking medical assistance, and traders who carry produce on the bus.

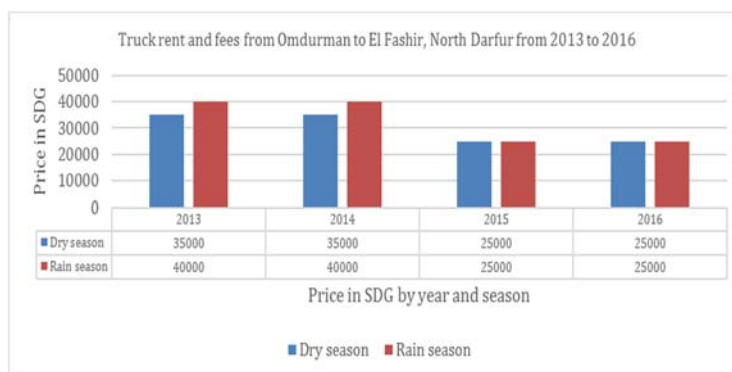


Figure 1: Truck rent and fees from Omdurman to El Fashir from 2013 to 2016

Table 1: North Darfur - Transportation cost in SDG per tonne from Omdurman to El Fashir; and from El Fashir to Omdurman

North Darfur	Before completion of the El Ingaz Road				After completion of the El Ingaz Road			
	Transportation cost in SDG per tonne		Duration of travel (number of days)		Transportation cost in SDG per tonne		Duration of travel (number of days)	
Direction of travel & commodity	For the dry season	For the rainy season	For the dry season	For the rainy season	For the dry season	For the rainy season	For the dry season	For the rainy season
From Omdurman to El Fashir								
Sugar	600	650	5	10-15	450	450	2	2
Flour	600	650	5	10-15	450	450	2	2
From El Fashir to Omdurman								
Groundnut	400	400	5	10-15	300	300	2	2
Tombac	400	400	5	10-15	300	300	2	2

South Darfur

South Darfur is the second state that the El Ingaz Road reaches, connecting El Fashir and Nyala. It has played a positive role here, too, in stimulating the local economy. Completion of the road has reduced the travel time and transportation costs on trucks from Omdurman from SDG 1000 per tonne to SDG 600 per tonne in the dry season, a fall of 40%, and by 42% during the rainy season. The reduction in travel time in the dry season is substantial, from 10 to 17 days before completion of the road, to 3 days now.

The trade and economic impacts include:

- 1) Increased availability and reduced prices of commodities that come from Omdurman, such as cement, sugar, flour and soft drinks
- 2) Reduced costs for transporting livestock to Central Sudan, such as cattle and sheep
- 3) Increased trade from Nyala to Central Sudan of commodities produced in South Darfur, such as dried okra and also handicrafts, for example baskets and handicrafts made of leather. (There does not appear to be a similar increase in the groundnut trade: low groundnut prices mean that most groundnuts are processed within Darfur for groundnut oil, although groundnut cake is traded in Central Sudan)
- 4) A boost to the border trade between South Darfur and Central African Republic (CAR) due to shorter travelling time. Sugar, flour and soft drinks are traded with CAR and coffee and wood exported out of CAR through South Darfur
- 5) Increased trade in oranges from Jebel Marra through Nyala to Omdurman

With the shorter travel time, lower transport costs and improved security associated with the El Ingaz Road, more passengers are now travelling by bus rather than flying or travelling with lorries. With the difference in ticket prices between SDG 1600 for an air fare and SDG 500 for bus travel between Nyala and Khartoum, South Darfur has become much more accessible. Small buses take passengers from Nyala to El Fashir (until the El Fashir to Menawashei sector of the road is completed) where they catch the larger buses to Omdurman.

Table 2: South Darfur - Transportation cost in SDG from Omdurman to Nyala/Nyala to Omdurman

South Darfur	Before completion of the El Ingaz Road				After completion of the El Ingaz Road			
	Transportation cost in SDG		Duration of travel (number of days)		Transportation cost in SDG		Duration of travel (number of days)	
Direction of travel / Commodity	<i>For the dry season</i>	<i>For the rainy season</i>	<i>For the dry season</i>	<i>For the rainy season</i>	<i>For the dry season</i>	<i>For the rainy season</i>	<i>For the dry season</i>	<i>For the rainy season</i>
From Omdurman to Nyala								
Commodities per tonne	1000	1200	5	10-17	600	700	2	3
From Nyala to Omdurman								
Per sack of Onion	100	120	5	117-0	60	70	2	3
Per sack of Orange	80	90	5	117-0	50	60	2	3

West Darfur

When the El Ingaz Road reached El Geneina, in West Darfur, a number of key bridges were constructed including, the Azoom Bridge and the Bari Bridge. This reduced the travel time between Zalingei and El Geneina from eight hours to only two hours, especially during the rainy season. There are now many small cars operating a taxi service between El Geneina and Zalingei throughout the day, at the cost of SDG 80 per person.

Transportation costs per truck from Omdurman to El Geneina have been falling since 2015 as more of the El Ingaz road has been paved, and especially when the paved road reached El Fashir. This is despite some individual costs rising, for example for fuel and spare parts, and high inflation rates. See Figures 2 and 3.

Trade convoys between Omdurman and El Geneina used to take one month and now take only one week. With completion of the El Ingaz Road and improved security (for example with the establishment of police stations along the route) the rental for a 27 tonne truck has decreased by 33%, from SDG 60,000 to SDG 40,000. All check points have now been removed between El Geneina and Zalingei

These factors have had a number of positive impacts on trade:

- 1) They have boosted the livestock trade as sheep and cattle are now transported by truck to Omdurman (as well as on the hoof), benefiting traders from Darfur and from Central Sudan
- 2) Although groundnut prices are too low to make it profitable for groundnuts to be transported to Central Sudan, the El Ingaz road has boosted the trade in groundnut cake for livestock fodder between West Darfur and Central Sudan. Most groundnut cake is supplied by small-scale agro-processors milling groundnut oil in El Geneina
- 3) Improved trade flows with Central Sudan have increased the availability of fresh produce such as fresh fish and fresh milk products in West Darfur
- 4) Large companies from Central Sudan have opened offices and distribution centres, including Sayga and Seen companies for flour, the Dal food group, and some new petrol stations. This has improved the availability of some commodities and stabilized prices
- 5) The combination of cheaper transportation due to the El Ingaz Road and the declining value of the Sudanese pound against the Chadian franc has encouraged the cross-border trade between West Darfur and Chad, in commodities such as soft drinks, leather products, sugar, flour and food commodities
- 6) Travel by bus is now more feasible for passengers between West Darfur and Central Sudan as the travel time has fallen. The cost is less than 50% of the cost of air travel

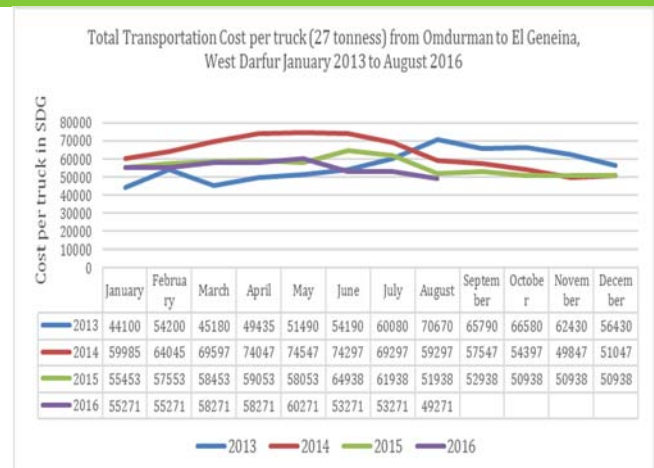


Figure 2: Transportation cost per truck (27 tonnes) from Omdurman to El Geneina, West Darfur from January 2013 to August 2016

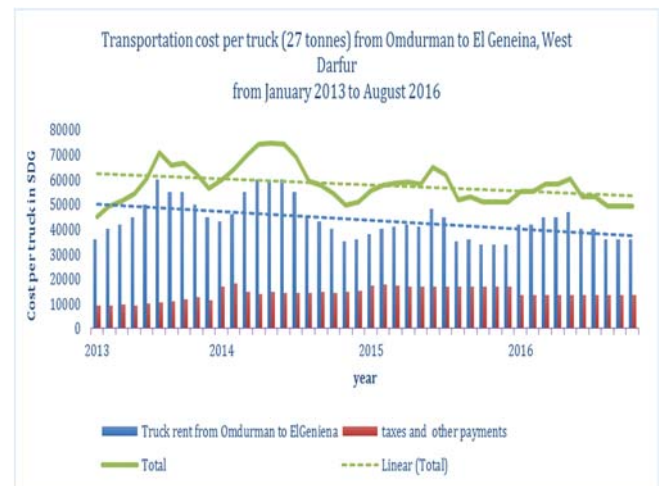


Figure 3: Truck rental and taxes per truck (27 tonnes) from Omdurman to El Geneina, West Darfur from January 2013 to August 2016

Issue Paper
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TRADE FLOWS AND THE EL INGAZ ROAD

Completion of the paved road between Zalingei and El Geneina and the associated increase in traffic and trade has stimulated a number of new markets and economic opportunities. When the *borsa* in El Geneina was moved from the centre of town to a new location at the east of the town it became a major hub for trucks arriving from Central Sudan and for trucks transiting to Chad. This in turn triggered the establishment of numerous restaurants and service centres. Sisi market in the IDP camp has become a major and flourishing market on the road between El Geneina and Mornei. In the past it had only one market day per week; now it has two with more than 50 small cars coming each market day as well as large trucks. It has become a big market for charcoal and firewood and for selling agricultural produce and handicrafts (e.g. basketwork) on which IDP livelihoods depend. The growth of the market has also led to restaurants and tea shops opening. In Mornei the local authorities moved the bus station from the centre of the town to the edge of the town where the El Ingaz road passes. This has triggered the construction of many shops, restaurants and service centres and a fuel station in the vicinity.



Photo: Construction of new fuel stations along the road e.g. Mornei



Photo: The livestock trade between Darfur states and Central Sudan has been boosted by completion of the El Ingaz road: livestock market in West Darfur.

Table 3: West Darfur - Transport costs for commodities imported from Central Sudan to Darfur (Omdurman to the state capital) and for commodities exported from Darfur to Central Sudan (state capital to Omdurman)

West Darfur	Before completion of the El Ingaz Road				After completion of the El Ingaz Road			
	Transportation cost in SDG per sack		Duration of travel		Transportation cost in SDG per sack		Duration of travel	
Direction of travel / Commodity	<i>For the dry season</i>	<i>For the rainy season</i>	<i>For the dry season</i>	<i>For the rainy season</i>	<i>For the dry season</i>	<i>For the rainy season</i>	<i>For the dry season</i>	<i>For the rainy season</i>
From Omdurman to the state capital								
Cement	140-160	170-180	12-15	20-30+	125	140-150	7	7- 12

Central Darfur

Transportation costs between Central Sudan and Central Darfur have similarly fallen with completion of the El Ingaz road due to a large increase in the volume of traffic to hundreds of trucks passing through per week. Some of the economic benefits are as follows:

- 1) Improved availability of and more stable prices for commodities transported from Khartoum, such as sugar, flour, spare parts, construction materials and cement. Stationary items and books are also more readily available to students.
- 2) Reduced and more stable fuel prices with the establishment of three large fuel stations. This benefits many although it has put small fuel traders out of business in Central Darfur.
- 3) Improved and increased trade flows of agricultural produce from Central Darfur to Central Sudan, including oranges, vegetables and other cash crops.
- 4) A boost to the informal cross-border trade with Chad, importing clothes, cosmetics and medical drugs from Chad and exporting sugar and other food commodities into Chad. This trade is run by women from ethnic groups that straddle the border, using camels and donkeys. While the trade has long been run from El Geneina through *Suq El Dalalyat*, the paved road to Zalingei means that women from Central Darfur are now also engaged.
- 5) Faster and cheaper transportation by road for people between Zalingei and Central Sudan. The journey that used to take a week travelling on trucks can now be completed in 48 hours in buses at a cost of SDG 500, compared with SDG 1,800 for the same journey by air.



Photo: There is potential for boosting trade with Central Sudan in groundnut cake for livestock fodder

Table 4: Central Darfur - Transport costs for key commodities imported from Central Sudan to Darfur (Omdurman to the state capital) and commodities exported from Darfur to Central Sudan (state capital to Omdurman)

Central Darfur	Before completion of the El Ingaz Road				After completion of the El Ingaz Road			
	Transportation cost in SDG per sack		Duration of travel (number of days)		Transportation cost in SDG per sack		Duration of travel (number of days)	
Direction of travel / Commodity	<i>For the dry season</i>	<i>For the rainy season</i>	<i>For the dry season</i>	<i>For the rainy season</i>	<i>For the dry season</i>	<i>For the rainy season</i>	<i>For the dry season</i>	<i>For the rainy season</i>
From Omdurman to the state capital								
Cement	65	70	20	30	50	60	6	8
From the state capital to Omdurman								
Orange	80	85	14	20	60	65	3	3

East Darfur

East Darfur state has benefited from the El Ingaz road to a lesser extent than the other Darfur states as the paved road does not pass through Ed Daien. The most direct trade route between Omdurman and Ed Daien is through En Nahood in Kordofan. However, tribal conflict in the east of East Darfur state has disrupted this route and trucks are instead travelling to El Fashir and then south to Ed Daien. So completion of the road to El Fashir has reduced travel time and transportation costs, facilitated by the removal of all checkpoints between El Fashir and Ed Daein. Trucks now reach Ed Daein from Omdurman in two to three days, whereas before completion of the El Ingaz Road the journey took about 10 days in the dry season and up to 15 days in the rainy season.

The transportation cost for one truck (of 30 tons) from Omdurman to Ed Daein is SDG 30,000. The transportation cost for sheep by truck is SDG 5,500 for 100 head, with a journey time of about four days from Ed Daien to Omdurman.

Some traders in Ed Daein choose to use the train for transporting their commodities because it is cheaper than transport by truck although takes longer. Cash crops like groundnuts, hibiscus and gum Arabic may be transported by train and manufactured goods brought back from Omdurman.

Passengers usually take landcruisers direct from Ed Daien to En Nahood where they pick up the bus for Omdurman that has come from North Darfur.

Although East Darfur has benefited less than other Darfur states from completion of the El Ingaz road, this is still a major hub for trade, to South Sudan and for agricultural commodities and livestock produced in East Darfur. Paving of the road between En Nahood and Ed Daien is planned. This could provide a real stimulus to trade and to economic activity in Ed Daien, for example the agro-processing of groundnuts.

Conclusions

This paper demonstrates how completion of the paved El Ingaz road has boosted trade flows between Central Sudan and all five Darfur states as a result of reduced travel time, improved security and lower transportation costs. While the state capitals along the El Ingaz road may have benefited most, other rural areas and markets within each state are also benefiting from cheaper and easier transportation.

The volume of trade appears to be greater between Central Sudan and the Darfur states than in the opposite direction. Commodities brought from Central Sudan, ranging from construction materials to vehicle spare parts to food stuffs and medicines, are more readily available with completion of the El Ingaz road; trade flows are more stable and prices are lower and more stable, benefiting consumers and users of these commodities. The arrival of large companies from Central Sudan in Darfur's state capitals is associated with this trend. This is putting some smaller traders out of business in Darfur but benefitting consumers.

Completion of the road and easier and cheaper transportation to Central Sudan has boosted the trade in livestock and agricultural commodities produced in Darfur. Many livestock, especially sheep, are now trucked to Omdurman, with an increase in the volume of trade. The trade in other commodities such as oranges, hibiscus and groundnut cake has also increased. However, transportation costs from Darfur to Omdurman are lower than from Omdurman to Darfur because trucks are not returning full. This clearly shows an opportunity here to further increase trade flows from Darfur and thus to benefit livelihoods, through increased agricultural and livestock production and increased agro-processing. Agro-processing adds value to agricultural commodities produced in Darfur, and promotes year-round trade over seasonal trade in fresh produce, a particular issue for commodities such as mangoes and tomatoes where there are wide seasonal fluctuations in price between the production and off-season². Support to agro-processing of groundnuts, for example to produce groundnut cake which can be traded with Central Sudan, could really benefit the numerous small-sale agro-processors which have set up business in Darfur's state capitals during the conflict years³. These are all ways in which livelihoods could be supported to be more resilient.

The road and associated improvement in trade flows has boosted the informal cross-border trade between Sudan/Darfur and Chad, and has improved the accessibility of Darfur's state capitals. Passenger movement between Darfur's state capitals and Central Sudan has also increased.

The positive benefits of the current state of the El Ingaz road to Darfur's economy highlight the potential value of completing all unpaved sections of the road.

2. See DDRA's study on the production and trade in fresh vegetables in North and West Darfur (Fadul et al, 2014) <http://www.sahel.org.uk/documents/VegetableTradeStudyReport2014.pdf>

3. As recommended in the cash crop trade study, 'Taking Root'. See <http://fic.tufts.edu/publication-item/taking-root/>



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