Focus on rail transportation from the northern citrus

Citrus production in the northern areas (comprising KZN, Swaziland, Mpumalanga, Limpopo and Zimbabwe) is anticipated to grow by 22% in 5 years' time, from producing a combined 72.5 million cartons in 2017 to an estimated 88.5 million cartons by 2022 (See table below).

This immediately raises concerns regarding the demand and supply of road transportation to these areas. During the 2017 citrus season, it is estimated there were about 35 800 truck trips required to transport citrus from these areas to the Durban port.

By the 2022 citrus season, it is estimated there will potentially be a demand for 43 800 truck trips, which is an increase for an additional 8 000 truck trips required per season. During the 2017 citrus season (the highest recorded production), citrus packhouses in these areas could not source an adequate number of trucks in line with production output to transport citrus to Durban.

The lack of supply of trucks to transport citrus during peak season has now a huge problem and is not likely to improve. This should be reason enough; given the growth forecast, that focus on rail transportation from the northern citrus production areas is now more important than ever.

In 2017, roughly 3 200 [known] containers (60 000 pallets worth) of citrus was transported by rail from Tzaneen, Bela Bela and City

SOUTHERN AFRICA CITRUS PRODUCTION FOR EXPORT (15 KG CARTON EQUIVALENT)

EXIT PORT	COMMODITY	2012	2013	2014	2015	2016	2017	2018 Est. 1	Est. 3 - 5 Yrs
Eastern Cape to PE & Coega Ports	Grapefruit	7,258	6,082	7,145	4,918	6,455	4,586	5,000	7,000
	Lemons	74,305	66,555	81,668	99,527	94,328	112,295	116,000	160,000
	Oranges	218,804	232,643	248,543	249,738	244,447	185,169	250,000	270,000
	Soft Citrus	26,172	29,331	39,044	40,302	52,743	47,820	55,000	85,000
	Total	326,539	335,993	377,142	394,485	397,973	349,870	426,000	522,000
Northern Region to Durban Port (Incl. Zimbabwe & Swaziland)	Grapefruit	153,052	228,324	195,084	206,217	178,086	195,385	205,000	216,000
	Lemons	36,042	43,949	54,775	55,582	62,409	92,530	105,000	140,000
	Oranges	499,895	538,196	512,407	532,139	456,476	581,858	580,000	620,000
	Soft Citrus	12,022	19,944	19,538	25,450	27,544	43,642	47,500	78,500
	Total	701,010	832,304	783,660	819,388	724,516	913,415	937,500	1,054,500
Western/Northern Cape to Cape Town Port	Grapefruit	9,527	9,772	10,520	10,912	17,496	21,616	22,000	22,000
	Lemons	19,696	22,733	24,674	28,438	26,256	28,975	30,000	45,000
	Oranges	148,015	153,839	176,871	165,529	153,490	149,523	175,000	180,000
	Soft Citrus	72,380	71,685	79,056	78,446	91,501	100,520	105,000	160,000
	Total	249,619	260,959	295,467	283,324	288,743	300,634	332,000	407,000
Southern Africa (Incl. Swaziland & Zimba-bwe	Grapefruit	187,988	253,206	212,749	222,047	202,037	221,587	232,000	245,000
	Lemons	130,379	133,378	161,318	183,547	182,993	233,800	251,000	345,000
	Oranges	903,817	955,564	940,981	953,786	854,413	916,550	1,005,000	1,070,000
	Soft Citrus	111,103	120,959	137,638	144,198	171,788	191,982	207,500	323,500
	Total	1,333,287	1,469,313	1,459,630	1,503,578	1,411,232	1,563,919	1,695,500	1,983,500

production areas is now more important than ever

Deep (the latter by not powering the reefer units during transport) to Durban; which was a mere 3.5% of the total export volume (915 000 pallets) from the Durban port. This volume is grossly inapt with much more commitment required to increase the use of rail transport towards 2022 to balance the transportation demands from the northern production areas.

Short term (immediate) projection shows an opportunity to transport 7 600 containers from 5 key rail sites using 9 purpose built reefer train units (comprising 38 FEU wagons, a diesel generator and diesel tank on a 40 wagon set).

The long-term (maximum 5 years) projection shows there is potential to transport 13 500 containers from the same five sites (with major expansion at City Deep) using 14 reefer train units. This is the equivalent of 10 000 truck trips per annum, which can assist to level the foreseeable imbalance and demand on road transport leading towards the 2022 citrus season.

Areas such as Marble Hall, Groblersdal, Hoedspruit, Letsitele, Limpopo River border and Zimbabwe produce sufficient volume to warrant immediate rail development and expansion. As it stands there are rail sites operational for each of these areas to rail containers to Durban as follows:

1. Tzaneen siding for containers packed in Tzaneen, Letsitele and Hoedspruit.

2. Bela Bela siding for containers packed in Marble Hall and Groblersdal.

3. Musina siding for containers packed in the Limpopo River and Zimbabwe.

4. City Deep, Johannesburg for containers packed in all the above areas.

Understandably, some obstacles are preventing the short-term volume projections from being achieved. Such as the fact that there are only 4 reefer train sets available at present (there is an immediate demand for 9 reefer train sets), there is also insufficient electricity supply (by mains or generator power) to power the reefer containers at some sidings and insufficient capacity at some sidings to hold the required amount of containers (land space at the sidings is fully utilized).

The Citrus Growers' Association and Transnet Freight Rail have agreed that expansion plans should take place within the City Deep area to meet the long-term volume projections. There is sufficient electricity supply to power a large numbers of reefer containers and there is sufficient capacity at the various sidings within City Deep

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to handle high volumes of rail throughput. There are also [limited] warehousing facilities (ambient and cold storage) within City Deep that are capable of storing, precooling and packing citrus into containers for railing to Durban. Consolidation points are imperative for product to be accumulated to make up containers lots from multiple packhouses. In fact, City Deep has sufficient capacity to rail one or two reefer trains daily during the citrus season offering a throughput volume of between 6 500 to 10 500 containers annually. Since the turnaround time for a train set to depart and return to City Deep is roughly 72 hours (best case), it would require only 6 to 8 reefer train sets to operate 1 or 2 reefer trains a day from City Deep. The potential to fully exploit the City Deep opportunities remains for future volume growth. Although in order for this to be accomplished, a cold storage facility with a capacity of 6 000 pallets would be required to be built in City Deep in order to precool citrus prior to packing the containers.

It is deemed imperative that at least 10 000 or more containers (20% of the anticipated total northern regions annual production) of citrus are transported by rail annually from the northern areas. This will offset the anticipated demand of an additional 8 000 road truck trips required towards the 2022 citrus season. The forecast for the 2018 season is for 4 500 reefer containers to be railed from the aforementioned rail sites – so a lot of work is needed to achieve 10 000 or more containers. The expansion plans will no doubt require a lot of persuasion from producers to encourage export agents and logistics agents to commit a certain amount of volume to rail transport. For Transnet to invest in additional reefer train sets and for further expansion at the rail sites, a form of guarantee is required by Transnet to make the much-needed investment. The Musina rail project is a good example of how the process works best with export agents and logistics agents working collectively with a preferred third party rail service provider to implement a service to the area. In this specific case, volume commitments were given for the third party rail service provider to submit a business plan to Transnet to make the necessary investment. Rail transportation should become the primary transport method (albeit with constraints) with road transport being the secondary but [although dominant] method.

For more information on rail developments, contact **Mitchell Brooke,** Logistics Development Manager, Citrus Growers' Association of Southern Africa, Tel: 031 765 2514 or email mitchell@cga.co.za.