Challenges the farming community faces with regards to the poor condition of the R335 and other roads.

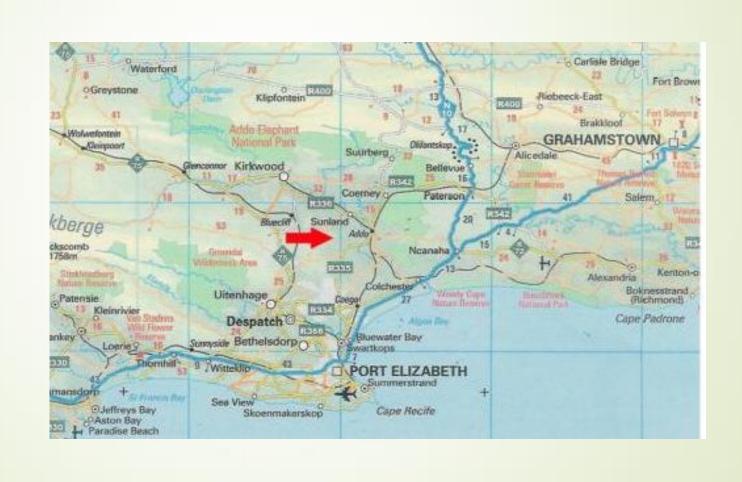
Presented by Greg Jones

Engineering and projects manager

Sundays River Citrus Company

With thanks to Flippie Ehlers for photos

### Area map



# Sundays River Valley



### Brief citrus farming history

- Citrus farming in the Sundays River valley starts early 1920's.
- Sundays River Citrus Company formed in 1928.
- Water from the Gariep dam for irrigation arrives in 1970's.
- Mix crop farming well into the 1990's.
- Single channel marketing via Outspan ends 1998.
- Farmers concentrate on Citrus farming.
- Citrus exports are the second biggest contributor to the provincial GDP after the motor industry.
- Private packhouses are built to accommodate expansion in the early 2000's.
- 2 juice plants process +- 100 000ton annually.

Steam trains used to transport wooden lug boxes to port early 1930's.



### Diesel Locomotives used later!



# Standard citrus pallet loaded.



# Spoornet OLJ wagons used!

- Loaded at the packhouse.
- Standard pallet contains 70 \* 15kg cartons.
- Railed down to port.
- Off loaded and cooled at FPT.



Vessels loaded using slings, direct into refrigerated decks.



# So what changed?

# Road transport abundant and cheaper!



### Reefer containerisation





# Containers loaded directly onto the vessel.





### But we need High-cube pallets!



Standard pallet, 70
\* 15kg cartons!

High-cube pallet, 80 \* 15kg cartons!

## High-Cube vs. Standard Stacking

- Packhouses and growers also soon realised that the fee charged by the cold store for breaking down standard pallets and building high-cube pallets at the port could be saved by simply stacking high-cube pallets with uniform counts at the packhouse.
- This also eliminated the harbour handling charge for the three additional pallets, and addressed the concerns raised by receivers.
- The cost saving of doing this at the packhouse is calculated on an FOB basis, it is estimated to be about R1.00 per carton.

# Transnet not able to move high-cube pallets effectively!

- OLJ wagons only able to accommodate standard pallets.
- Trials with different wagons not successful!
- Export agents specify high cube pallets!

### Containerisation at the packhouse!

- Packhouses now load containers at the packhouse.
- Further savings doing this.
- Less handling of pallets.
- Fruit arriving overseas in better condition.



#### What about on the farm!

- Citrus traditionally harvested into bulk 2.7 ton trailers.
- Transported to the packhouse by tractor.
- Empty trailers taken back to farm.
- Only 2 trailers hauled at a time! (14 plastic chep bins)

## What changed here?

- The new 400kg wooden crate arrives!
- Replaced in 2004 by the new plastic bin!
- Farmers start buying plastic bins!
- All farming units now pick into plastic bins.
- Establish big loading areas on the farm (either paved or concrete)!
- Buy forklifts and start loading trucks!
- New transport companies start flourishing!
- Farmers buy there own trucks.
- Able to load up to 54 plastic crates per load!

# Harvesting citrus orchards!





### Traffic by numbers

- Very little road transport until 2001!
- Most farmers transport by tractor!
- Road maintenance still reasonable in the early 2000's!
- Concentrated citrus production starts early 2000's!
- World markets expand.
- Sundays River valley lemons amongst the best in the world! Single biggest export lemon producer in the world!
- Roads not designed to carry this heavy traffic! Change from tractor trailer to double axle, triaxle and interlink.
- Business chamber estimates that approx. 12 500 trucks use the road to the port a year!
- 198 000 truck loads of fruit in one direction to the 18 packhouses.
- 40 000 workforce and 6000 scholars transported daily
- 170 000 visitors to the Addo park annually.
- 22 million cartons hauled to the port!
- Approximately 2000 workers commute between Port Elizabeth and the valley daily, by bus and motor vehicle!

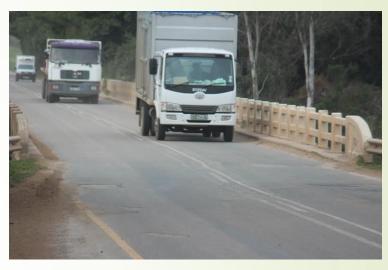
# So what effect does this have on the road infrastructure you are asking?

- Road infrastructure under tremendous stress!
- Many potholes start developing!
- Very little maintenance done, due to budget constraints from DRPW!
- Crumbling infrastructure!
- The roads are very unsafe.
- High accident rate!
- 3 Very narrow bridges. Mirrors touch. Two trucks cannot enter the bridge simultaneously, safely!
- Dunbrody section on the R335 and the section from Sun Citrus and Piet Swart bridge to Kirkwood town, +-9km, no yellow lane section.
- There are 34 gravel roads entering the R336 from citrus farms and packhouses. Stop signs non existent. T junction chevron signs non existent
- In rainy weather, all the mud and stones from the trucks entering the R336 from these roads, makes it very slippery and mud covering the roads signs. Very dangerous.

# 3 Very narrow bridges











# Effect on the Citrus industry and local community?

- The local business chamber did some research in 2014.
- Article in The Herald.
- Estimate about R 150 million losses to the industry!
- Pallets are damaged due to the uneven road surface.
- Fruit is damaged! Bottom layers are squashed and squared fruit prevalent!
- Loads are lost on dangerous corners!
- Fruit arriving at packhouses from the farm has "Oleo", due to rough transporting conditions!

## Some of the tar roads in the valley









# Roads cracking and too narrow



#### Kirkwood main street

















# Condition of the gravel roads













CONTAINER LOST R335 ADDO ROAD R335





# Transport on the roads







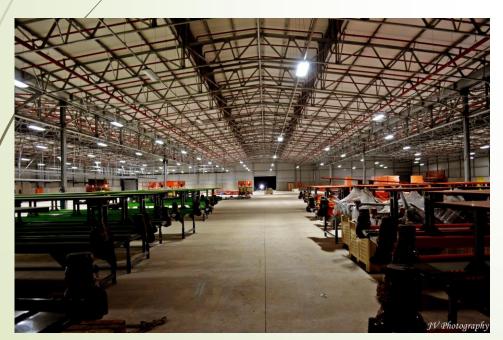


### Citrus industry growth!

- The local citrus industry is in a tremendous growth stage.
- Nurseries are expanding.
- Additional 4000ah destined to be planted within the next 5 years.
- 2002 ~ 9 million cartons produced!
- 30% transported to local market and juice plants
- 70% exported with the following volumes:
- Early estimates indicate:
  - > 2015 ~ 22 050 000 cartons packed
  - > 2016 ~ 23 475 000 cartons
  - > 2020 ~ 27 770 000 cartons estimate!

# Expansion in the valley.

- More packhouse facilities required
- Labour force to expand by 10 000
- Traffic volumes increase by 20%



New SRCC packhouse



### Remedy!

- Concerted effort from the local business chamber to get desperately needed maintenance done on the roads.
- Lobby provincial government to get the roads maintained by SANRAL!
- 200 Km of the gravel roads in the citrus producing area and packhouses has no budget from DRPW. These roads are 95% of all the gravel roads.
- 68 roads have disappeared from the road map of DRPW after the divisional councils were abandoned.
- Some of these gravel roads carries more than 200 vehicles per day!!
- We urgently need some of them to be surfaced!

# Thank you.

Any questions?

With thanks:

Flippie Ehlers/ photos and stats Kirkwood business chamber CGA/ Citrus academy/ photos Juane Viljoen/ photos