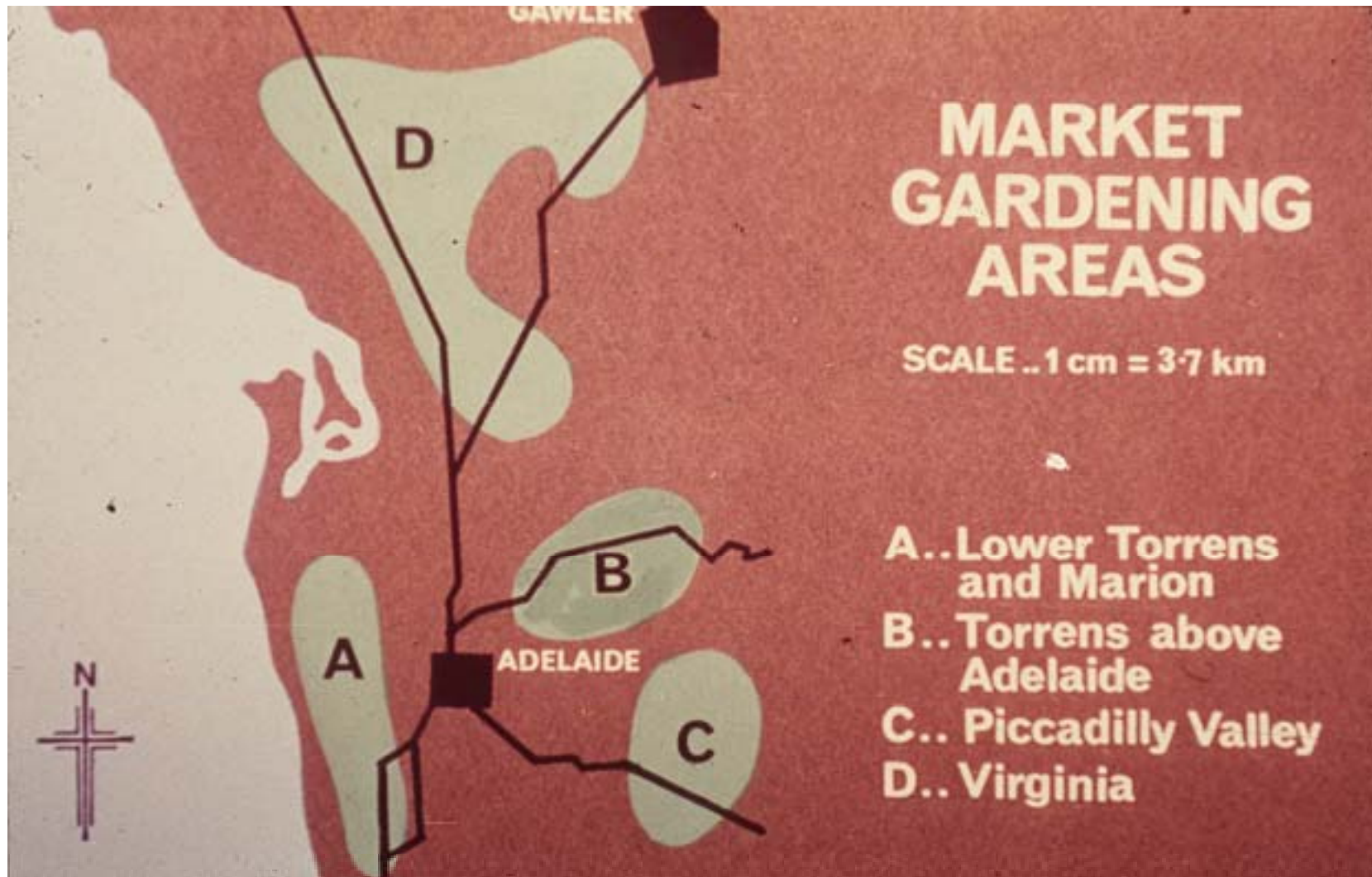


MARKET GARDENING IN SOUTH AUSTRALIA

A photographic slide teaching resource assembled
by the Education Department to be used with high
school students studying agriculture.

Issued in 1977, this series of 22 photographs provides images of the vegetable industry and its technology during the 1960's and 1970's when it was being displaced from the Torrens Valley by the expanding suburbs of Adelaide.



Map of Market Gardening Areas highlighting major vegetable production zones along the River Torrens in the Eastern and Western suburbs. At this time, production was rapidly expanding in the Virginia area as growers were displaced by expanding urbanization. The Piccadilly Valley was a major Adelaide Hills vegetable production district at that time.



Torrens Valley vegetable growing near Athelstone.



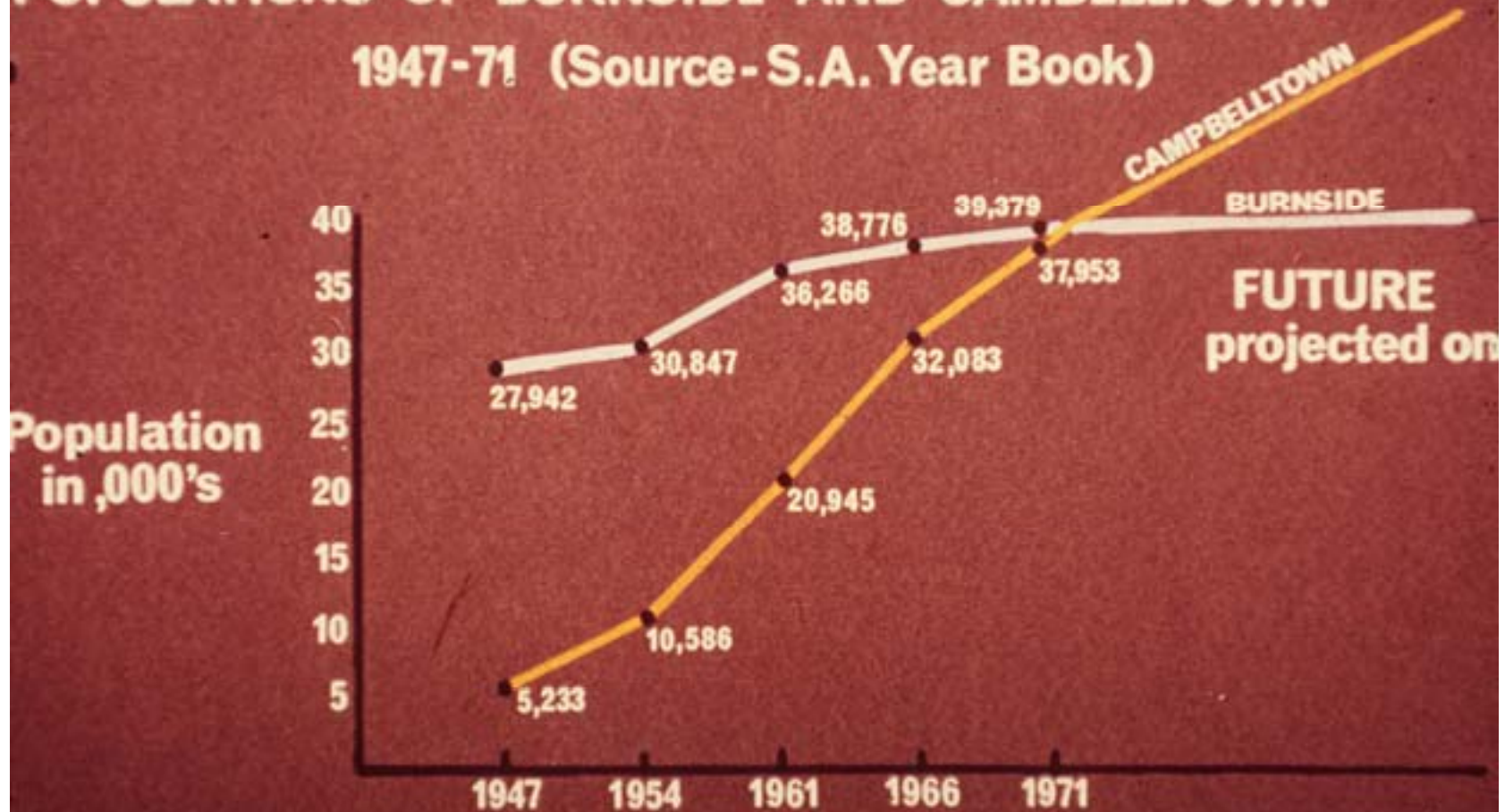
Residential land for sale on what was previously vegetable growing properties. The expanding urbanization was a major force displacing the Adelaide Plains vegetable industry.



Celery crop – during the 1930's to the 1960's, the Torrens Valley was the main celery growing region in Australia. A large proportion of the celery produced in these districts was railed to Melbourne and Sydney markets.

POPULATIONS OF BURNSIDE AND CAMBELLTOWN

1947-71 (Source - S.A. Year Book)



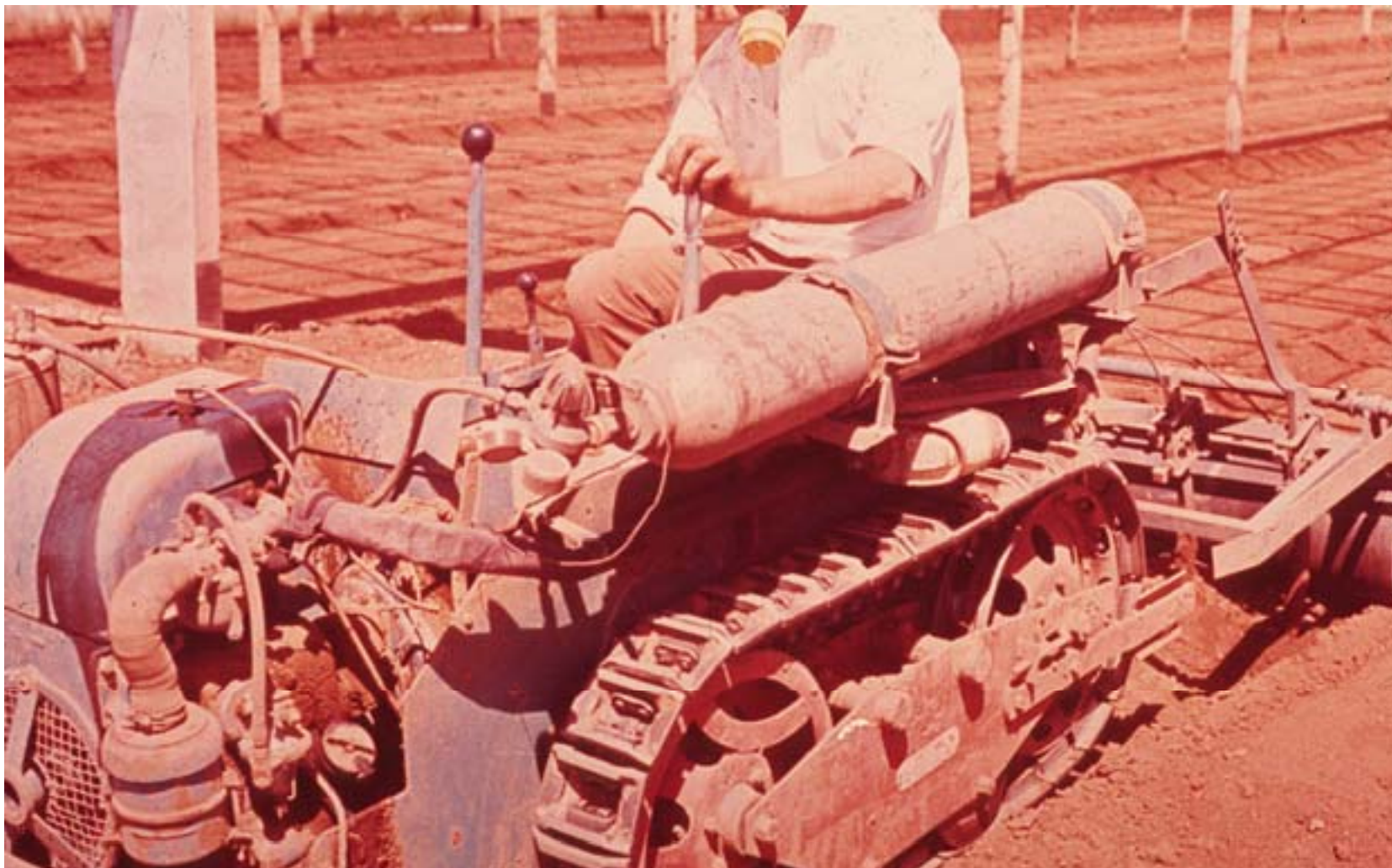
Graph predicting post WW2 expansion of urban populations in the eastern suburbs of Adelaide.



Glasshouses – glasshouse tomatoes were a major high value crop for western suburbs vegetable growers from the late 1920's to the mid 1970's. The Adelaide Plains low frost incidence and mild climate was ideal for winter and spring tomato production. Most of the crop was sold in Melbourne. Improved refrigerated road transport from cheaper outdoor tomato production districts in Bowen and Bundaberg forced glasshouse growers to diversify to cucumber, capsicum and other crops in the 1980's.



Tractor Used in Glasshouse – the three point linkage rotary hoe was the main tillage implement.



Tractor Used to Fumigate Soil. The Ransomes MG5 and MG6 crawler tractors were very popular with vegetable growers from the 1940's to the 1960's. Highly maneuverable, these small tractors were frequently used for inter row cultivation. This machine is equipped with a fumigation injection rig. Chloropicrin was one of the main fumigants used by glasshouse growers to control soil borne diseases during the 1950's to 1970's.



Banked Soil in the Glasshouse – banking was used for flood irrigation.



Young Plants – a newly established planting of glasshouse tomatoes almost ready to be trained on to strings suspended from the glasshouse roof.

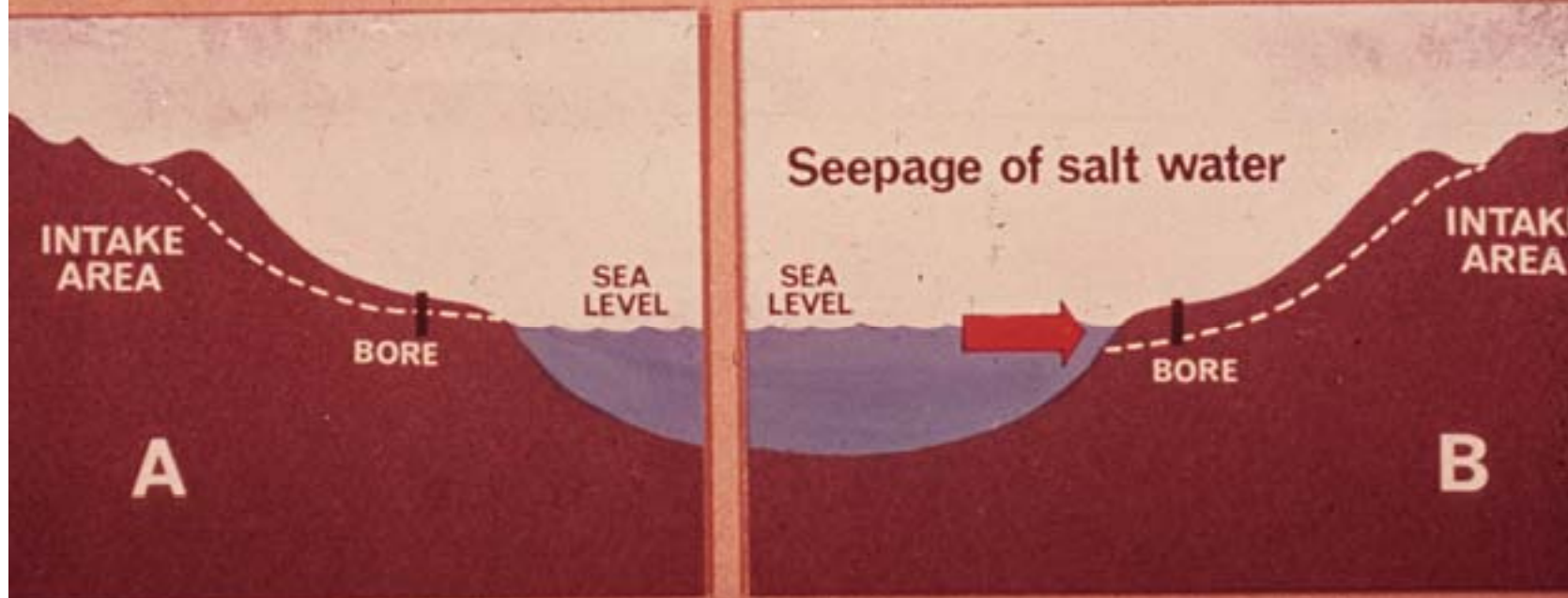


Cultivating the Soil Between Rows of Young Plants. Cultivation was the main means of weed control in glasshouse crops. Many growers used these small motorised cultivators or rotary hoes. Motorised cultivators similar to the one shown were locally manufactured by A.O. Modra at Underdale. This company also manufactured steel glasshouse frames and other items of equipment for small vegetable growers.



Pump used to lift water from underground aquifers. Turbine pumps became popular in the 1950's. They could extract large volumes of underground water from 100+ m deep aquifers.

WATER TABLE CHANGE WITH EXCESSIVE USE



Water table – rapid expansion of vegetable production and over extraction of irrigation water from underground aquifers in the Virginia district became recognised as a serious sustainability problem in the 1960's. Legislation was introduced to control sinking of new bores and extraction of irrigation water.



Pump used to lift water from the River Torrens – centrifugal pumps were widely used by vegetable growers for pumping irrigation water from rivers. Many pumped water into large concrete storage tanks before using it for irrigation.



Cauliflower production near Virginia.



A young almond orchard near Virginia.



Onion Picking Machine – this unit was used to lift onions (after windrowing from beds) from the ground and load them into bulk bins. It has a hand sorting platform for rejecting damaged or unmarketable onions as they are lifted from the field.



Piccadilly Valley – this intensive vegetable growing area was Adelaide's main source of summer vegetables from the 1850's to the 1990's. Steep slopes made mechanisation difficult, and it is now used mainly for production of cool climate wine grapes.



Picking strawberries near Athelstone.



Hand packing strawberries into punnets.



Transporting vegetables to the City Markets. At this time, Adelaide's main East End wholesale market was located between Rundle and Grenfell Streets. The wholesale produce market was relocated to Pooraka in the 1990's.



Retailers – scene from Adelaide's icon of fruit and vegetable retailing area, the Central Market.