

MEMORANDUM FOR CABINET BY THE MINISTER OF
TRADE, INDUSTRY AND AGRICULTURE
ON THE WATER SUPPLY POSITION

Hon Ministers will no doubt be aware that the increasing water demand in Malta has necessitated the installation of a Seawater Desalination Plant. The Past annual growth in water demand due to improved living standards etc has gradually been assuming greater emphasis with the national diversification of the economy. The tourist industry, in particular, is having the greatest impact in water use. Horticulture is also contributing towards an increase in the rate of growing demand.

The conclusion had been reached, and corroborated by experts from abroad, that no new significant additions in groundwater yield were possible and that future additional water demands could be met only by desalination. Until the commissioning of the first distiller, the department has had to resort to over-extraction of the aquifers to meet the growing demand and at the same time has endeavoured to control the consequent progressive salinification of the water. The department has concurrently been concentrating its energies on water conservation measures with special regard to the detection of leakages in the distribution system.

With the best plans and engineering activities, all groundwater resources must obviously depend on rainfall. Last winter's rainfall (15.4 ins) - i.e. about 25% lower than the average of 20 inches - reduced the natural replenishment of our aquifers. On the other hand, the water demand has increased even more rapidly than in the preceding years. In plain figures, the present-day summer demand is over 10 million gallons per day whilst we are only extracting about 9 million gallons daily. This daily imbalance between demand and supply is being met out of our surface water reservoirs (total capacity in Malta about 82.5 million gallons). Incidentally a separate memorandum on the need to reconstruct or otherwise Ta' Qali collapsed reservoir is being submitted shortly to Cabinet. The 11 million gallons additional storage the proposed reconstruction would provide should be viewed in the context of this and future years' balancing the summer demand and supply. Today (27th August, 1966) these surface reserves stand at 46 million gallons.

These reservoirs cannot be completely drained on account of silting at their floors and also due to the limitation in water level drops necessitated by regional distribution requirements. In other words, the minimum safe gross capacity of these reservoirs is limited to about 35 million gallons. The present rate of depletion of about 1 million gallons per day, i.e. the daily imbalance between supply and demand, can be met for another 12 - 15 days. The position could change in either of two ways, namely by reducing consumption naturally with the advent of early rains and cooler weather, or by artificial control on consumption. The latter course is very intricate to implement in practice technically and also most distasteful to the public at large, especially when industrial and tourism are gaining momentum. The Department has already throttled service mains and even individual house water services; recently (August 26) stopped mains water for irrigation purposes; stepped up repairs to mains and other installations and in general covered all the normal ground to reduce unnecessary consumption. Any additional measures have now to be either temporary throttling of the principal water mains to various localities with the consequent justifiable complaints about insufficiency of water or even the physical temporary suspension of supplies to certain regions. It is not possible to limit the suspensions to the various region/s equitably so as to ensure a minimum supply to every household. This is due to the different site levels of premises; the higher areas will be the most to suffer from almost complete water shortage as a result. Water, unlike electricity, simply cannot be loadshedded with uniformity of sacrifice on the part of consumers. By gravity water flows always to the lowest point in any distribution system.

Hon Ministers will no doubt realize the importance of the seawater desalination plant as our national water salvation. The current first phase of the plant - expected to go into commission in about three or four weeks time - will produce 1 million gallons a day (330 million gallons a year) of distilled water which will be conveyed by pipeline to Luqa Reservoir for blending with groundwater before distribution to households etc. This additional source of 1 million gallons daily will help in meeting the additional demand in the Luqa water region only (i.e. the Three cities mainly and indirectly the South-Eastern area) and no advantage will be gained in the rest of the

Island. And the highest water demand is taking place in the Central and the North-Western parts of the Island. This limitation will however be remedied in the course of the development of the second stage of the Malta Power/Water station project when the projected second pipeline will be routed to Ta' Qali Group of Reservoirs and not to Luqa. Plans have already been made though the further development of the Power/Water Station has apparently been delayed on financial grounds. The water position next summer is bound to be more critical - the demand can be expected not only to follow the past years growth but to increase further as a result of the completion of a number of hotel projects. It is therefore of supreme importance for the economic and social development of the Island to go ahead immediately with the installation of the second, and possibly the third distiller. In view of the real urgency involved, perhaps arrangements may be made for the funds available under this department's Capital Expenditure vote for the provision of two distillation units (£1 million) to be allocated for the purpose of installing the generation/seawater distillation equipment necessary to provide the second distiller by the end of 1967.

It might seem an unhappy timing on the Department's part to sound an alarming note on the brink of autumn rains after having gone through the stormy days of summer. The timing, however, has not in the least been accidental. All along the demand and supply of water was daily being scrutinised and controlled. In the earnest hope of having the additional desalinated water at our doorstep - unhappily there has been some delay in the scheduled commissioning of the first distiller producing one million gallons a day - and with the rain-bearing clouds approaching, the department felt safely on the road to meeting the water demand without unnecessarily alarming Cabinet and the public. It is still possible, however, that with the help of factors beyond human control the crisis will be averted.

15th September, 1966.

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