

Ag2030- Charlotte Millington

Drip irrigation is a water and space efficient method of farming that has the potential to not only increase the yield size, and quality of a number of given crops but also drive the agricultural sector to the Ag2030 target of \$100 billion production. Drip irrigation is a form of irrigation that focuses on the idea of reducing evaporation by allowing water to slowly drip onto the roots of any given plant through a network of small pipes and valves. There are several reasons that drip irrigation is beneficial to actively driving the Ag2030 target. These include;

- Water efficiency: The rate of evaporation has been reduced which leads to less water being used, as well as reduced run-off and wastage of water. This is particularly relevant in the hot arid climate that exist in Australia.
- Higher crop yields and quality: Plants are getting the necessary amount of water and nutrients right where they need it which means that they can grow in an environment that is best suited to them.
- 100% usage of land: Drip irrigation can be used in any soil type and topography. It can further be used in metropolitan regions in areas which are being 'wasted', i.e., rooftops etc., further adding to the higher yields of crops.
- Energy savings: Drip irrigation runs on low pressure water flow meaning that pumps are not required, and electricity usage is reduced. These saved expenses can be re-invested into farm equipment to further advance methods of farming.
- Efficient use of crop protection and fertilisers: Wet foliage can often lead to fungal infection, drip irrigation reduces the need to protect crops against wet foliage and other pests that it accompanies, once again reducing obsolete expenses.

Whilst it is easy to say that increasing quality and yield size of fresh produce will drive the Ag2030 target to the \$100billion, you must be asking how? The simple answer is trade. Trade is an extremely important sector in Australia that is always being used in conjunction with the Agricultural sector. Increasing Australia's competitiveness in the fresh produce market means that the Ag2030 target of \$100billion is reachable. Using drip irrigation to increase yield size and quality whilst decreasing other expenses means that Australia can acquire a competitive edge in the trade sector. Offering fresh produce that is better than that produced by any foreign country is sure to drive the Ag2030 target of \$100 billion in production within the agricultural sector.

Drip irrigation can also be used in conjunction with new technologies such as remote monitoring systems which will further advance quality and yield size of crops, however, initially, the use of drip irrigation by itself will be enough to boost the Ag2030 target.