

PLANNING

Most vegetable crops can be produced in almost any area of the country during at least some part of the year. While vegetables are comparatively easy to grow, it is often much more difficult to produce economic yields of a high quality which is acceptable to the consumer market. The following are a few of the points which should be studied by the potential grower.

Knowledge of crop requirements

Economically successful producers realise that these crops need to be grown intensively, with strict attention to detail. These producers specialise in certain types of vegetables, and learn each group's specific growth habits and peculiarities. Quality vegetable production is demanding of time, good management and planning. Those who decide to grow such crops only because of current high prices might fail because they have no lasting commitment to quality production. Neither production requirements nor marketing would be thoroughly investigated by such producers. Acquired experience will often help to solve problems not adequately covered in available literature.

Climatic and soil requirements

A thorough knowledge of potential vegetable crops and their requirements, in terms of climate and soil, should be acquired before any large-scale planting is attempted. These requirements should be compared with the local climate and soil situation. The frequency of hail and heavy winds, or storms, should be evaluated before final decisions are taken. The establishment of windbreaks might be considered. Seasonal temperature fluctuations will determine times of planting and potential yields of sensitive crops.

For conventional farming, soil samples need to be submitted for analysis, so that the particular fertilizer requirements for a specific crop, with a realistic target yield, can be applied. Organic farming demands special knowledge and skills, and sufficient quantities of suitable compost, to be successful.

Irrigation

Setbacks to plant growth and development, with a resulting loss of quality and yield, will occur if there are no irrigation facilities to overcome the irregular nature of natural rainfall. About 8 000 cubic metres of water, per annum, are generally necessary to cater for each hectare used for intensive vegetable production. Sufficient irrigation equipment to cover the peak water requirements of each crop must be available.

Equipment

Apart from the normal equipment, such as tractors, ploughs, tillers, and harrows, other specialised equipment might be necessary. Suitable planters might be required for some crops. Spraying equipment for the control of insect pests and diseases is essential for the successful production of most vegetable crops.

Pest and disease control

Very few vegetable crops will be grown without significant losses from insect pests and diseases, unless the grower has some knowledge of which problems could be expected to occur, and is prepared for taking appropriate and timely counter-measures.

The use of control measures such as planting resistant cultivars, avoiding cultivation when the foliage is wet, selection of planting times when the problem is less likely to occur, crop rotation, changes in irrigation scheduling, or other cultural practices, all play a role.

If chemical control is necessary in order to restrict losses, it is important to know in advance what is registered for use and is most effective, for a particular problem in the crop.

Many chemicals, particularly fungicides, need to be applied on a preventative basis because they have comparatively poor curative properties.

Some problems cannot be controlled by the application of chemicals but, in any case, the use of chemicals should be minimised where possible.

Labour

It is most important to consider the fairly high labour requirements of many of these crops. Is labour easily obtainable? Is transport required to fetch such labour? Many operations, such as transplanting, weeding, irrigation and, particularly, harvesting and packing, have a high labour demand. Transplanting, for example, might require from 10 to 40 persons to plant one hectare in a day, depending largely on the plant population used and the specific crop. Twelve trained labourers (possibly double this figure if unskilled) should pick 1 ton of green beans in a day; with an average yield of 7 or 8 tons per hectare, and 15 tons for a good yield. Large plantings require high numbers of labourers over a concentrated period. Bear in mind that many vegetable crops are highly perishable, or retain peak quality for very short periods, so that any delays in harvesting or marketing can have disastrous consequences in terms of marketable yield and quality.

Supervision of labour activities is very important.

Transport and distance to market

One should seriously consider the availability and the cost of transport for marketing the crop. The distance to market is also an important factor. Good prices are likely only for fresh produce having a good appearance; delays cause deterioration in condition and appearance, which reduce sales and prices. Apart from the effect on production costs, distance from market can affect choice of crop. One cannot hope to achieve good prices for highly-perishable products, like broccoli or spinach, if there are long delays before marketing. Crops such as butternuts, pumpkins and potatoes would be better choices in such circumstances.

Production costs

The direct costs of production of most vegetables are high, frequently several thousand rand per hectare, and the risk of financial loss is always present, particularly for any single planting. However, the financial rewards can be great. One should consider spreading the risk by having several small plantings distributed over the season, or by growing a greater range of vegetables over the year. Low prices of any one vegetable, or at any one time, will then have a lesser overall effect on cash flow.

Price trends and marketing

Except when the crop is grown under contract to processors or certain other outlets, when prices may be pre-determined, produce prices may vary tremendously, even over relatively short periods, due to the effects of supply and demand. Prices are notoriously difficult to forecast. It is generally the established grower who has either developed a good name at a particular outlet, or who produces better than average crops, and can ensure continuity of supply, that is successful in the long term. Such growers normally spend much time in investigating marketing aspects, such as packaging and packing, various possible marketing outlets for their particular crops, price trends over the year, possible out-of-season production, continuity of supply, sales capacity of the various outlets, and so on. One must know the market and market preferences, and be able to supply the type and quality of product demanded by the customer. Market research is as important to the average grower as is knowledge about producing the crop.

The first rule of marketing is to focus on your customer's needs. Find out who they are and what they want. Find out how, where and when they would like it presented. Meet these needs and you are more than half-way to success.