

## **Consulting Principles**

1. Investing full resources into a reduced growing operation is far more productive and less risky than investing partial-resources into an over-sized growing operation.
2. High-value farming is a high-risk enterprise because the potential for value-lost is high. Risk is equal to the probability of failure multiplied by the value of the lost income. Value is likely to be high because the price is high, and probability of failure is relatively significant.
3. Eliminating and reducing costs and losses is a big part of profit gain.
4. Little costs add up to big losses. Some examples of little costs that add up:
  - a. Spraying pesticides. (Labor and materials.)
  - b. Watering. (Labor, meter rate and/or equipment costs.)
  - c. Sales loss or price reduction due to quality compromise.
  - d. Reduced production due to adverse growing space.
  - e. Band-aid solutions due to poor planning ALWAYS cost a lot.
5. In all strategic planning and trouble-shooting, the “low-hanging fruit” – the easiest and least expensive solution – usually yields the most return (in reduced risk) for the investment.
6. First runs are always more expensive and time-consuming than planned, often by a factor of 2.5.
7. The best way to build a long-term high-value farming system is to build a successful, highly-efficient and productive model at small scale and then scale it up after demonstrated success. (Economies of scale will change and little costs will transform to big costs. Work flows can become very inefficient.)
8. Strategic planning, mapping, and information management will significantly increase long-term profitability and sustainability.
9. The insects and disease will come uninvited. So a strategy is necessary, whether it is the strategy of chemical control or integrated pest management. High-value plants are usually tasty pest attractants.
10. Biological and ecological agriculture is about engineering biodiversity and growing healthy, resilient, resistant and vigorous plants.
  - a. Start with plenty of high-quality soil-mix; for example, with *Cannabis sativa* cultivation, I recommend 2 gallons per ounce of dried flower (to vary with length of flowering period). Adequate quantity of a good mix will decrease labor costs.
  - b. Feed the SOIL; do NOT feed the plant. Fertilizer salts kill soil organisms and should be restricted to drip media and hydroponic systems.

- c. Maximize diversity in the growing space for crop resiliency and resistance.
  - 11. Planned and designed upfront investments in the agronomic system will yield significant long-term benefits in work flow and resource and equipment use. Conversely, lack of designed investments will yield significant long-term costs.
  - 12. Crossing between growing modes yields problems and sacrifices the advantages of both crossed systems. (See Growing Modes Table.)
  - 13. Before fully deploying an unfamiliar system, establish a sub-plot and experiment with it. If the sub-plot is successful, then scale-up.