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## Greenhouse Expansion<sup>1</sup>

Moderated by Ray Kittayama, Kittayama Bros., Brighton, Colo.

Although most of us mean building more greenhouses when we talk expansion, it could just as well include mergers, buy-outs or acquisitions, consolidations, and even renting greenhouses. Several of you here have recently bought or rented additional facilities, and this too is expansion as far as you are concerned. Air conditioning, 2-year culture, shoot-tipping, and CO<sub>2</sub> have also meant expanded production in a sense.

Basically this panel will discuss construction of more greenhouses, or increasing capacity in order to increase production and better utilize people, capital, land, and equipment, and, we hope, make more profit. I know we are not all in agreement on this subject either in degree or in direction, and there is sound reasoning on the part of those who do not want to build more greenhouses. A grower who feels he should not add more greenhouses at this time gives his side of the story.

### Don't Expand by Roy Obluda, Golden, Colorado

There are three brief reasons why I am against expanding. The first is loss of detailed control of quality and yield. The larger one gets the more he sacrifices control. I have near perfect control on my

present place. If I doubled or tripled its size, something would give.

Rising costs are my second reason. Interest is at 7 to 9 percent. If I borrow \$50 thousand for expansion, I would pay back possibly \$81 thousand. Reliable labor is more difficult to get each year. Social security and other benefits for labor are going up each year and getting more complicated.

My third reason for holding the line is that prices have remained the same on carnations since 1957. The only way we have been able to meet rising costs is by producing more in the same area. I believe the end of increasing production is in sight. When someone asks me about expansion, I simply say "Don't."

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Ed. note: Roy Obluda, Obluda Greenhouses, Golden, Colo. has about 14,000 sq. ft. of glass houses and crops these most intensively. His is a family operation producing a maximum yield and quality.

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Now we would like to take you through the actual process of putting up additional greenhouses, either on your present premises or a new location, and all its many ramifications. All of the next panel members have gone through this or are in the process, and they have chosen subjects that are pertinent and in which they have had actual experience.

### Planning a New Plant by John Hollberg, Englewood, Colorado

There are many decisions to be made when relocating greenhouses. Your reasons may be for expansion and more room, or your present area is no

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<sup>1</sup>Reconstructed from a panel discussion at the Colorado Carnation Conference, November 3, 4, and 5 at Denver, Colorado.

longer suitable because of zoning or land values. Some of the planning that goes on before a move: How big to build, where you are going to market your crop, and costs of land, buildings and equipment. The cost of the structure is a small part of a move. Things that go inside a greenhouse cost as much or more than the structure.

Availability and quality of water is most important. Land with a shallow well of good water is ideal. It is almost impossible to get a permit for a shallow well in most areas of Colorado today. Deep wells can be very expensive. City water, if available, may be the answer. Costs of city water vary with districts. No matter what water you use the quality of the water is most important. Quantity should also be considered. Unless you have a special low-volume irrigation system, a greenhouse of 100,000 feet should have about 250 gallons per minute.

After you find land with water, there are other important requirements. You should be near a natural gas main as this seems the best fuel at the present time. It is the cleanest fuel today and original investment in boiler is less than for coal or oil. You should be in an electric power loop, not at the end of a line. Your chances of power outage would be considerably less. You should locate near a labor supply. An agricultural area usually has the kind of help we need. Female help is almost always plentiful in the lower income areas. Good roads and transportation are needed for your labor and your product. Roads must be plowed out in winter. You need ready access to your wholesale house and to the airport.

If you locate in some farming areas, you have a dirt and dust problem. You should try to avoid high wind or hail areas. You need to be far enough from the mountains that daylight hours are not unduely shortened. You should keep in mind prevailing winds that might blow smoke and smog to your area. You should know the zoning in an area - what it is zoned at present and what the future plans for the area might be.

It is very important that the contour of the land allows adequate drainage. We have to get rid of the water we use and the rainfall from the greenhouse structures. Drainage from an acre of greenhouses can be quite a problem in a flash rain.

Sometimes we look too much at the price of land and not enough at the quality. Actually the land cost is a small percentage of what we spend on a greenhouse. When you have found the ideal spot for a greenhouse, it is likely that a housing development or another industry also wants it. Desirable land for greenhouses will probably not be cheap.

## Financing Expansion by Anthony Euser, Broomfield, Colorado

When we build, we are committing a sum of money today in hopes for a return of a stream of net cash benefits in the future. How can we get the maximum "earning power" out of our business? To achieve this we must increase the percent of net operating

income from our net operating assets, either by cutting production costs, increasing productivity per square foot, increasing price per unit, or by increasing productive area. We must plan for profit. In our business we deal with variable costs (repair, labor, utilities) and fixed costs (interest, taxes), and some place we have a break-even point. Up to a point we can reduce our variable costs through expansion. This takes money or funds.

Funds invested have a cost, the cost of capital. Our job is to keep this cost to a minimum, now and in the future. There are two types of funds used in our business: debt and equity. Debt is the obligation incurred by borrowing. Equity is the owner's share of the assets. On the strength of our equity we are able to secure money from an outsider. How far would we dare to go? The problem here is of liquidity versus profitability.

Our first objective is to see to it that bills are paid when due. Our second objective is to make a high rate of return on the investment. To meet our second objective we must secure funds with a limited return; a set percent of interest, not a share of the net profit. As a borrower you must have confidence; it takes courage and faith to undertake business risks. Equally it takes confidence of the creditor in the probability of future payment. The credit man actually "accepts" or "rejects" the credit power possessed in some degree by the prospective borrower. The strength of credit power at any time depends on those factors inherent in the risk and those factors which are external to the risk, such as money supply or the present phase of the business cycle.

Outside sources for funds are commercial banks, trust funds, savings and loan companies and private parties. A loan agreement is a contract - Watch out!! Have your lawyer read the agreement before you sign it.

The commercial bank is the bank for either secured or unsecured short term loans or self-liquidating loans to business, industry and agriculture; and intermediate loans (5 to 10 years); or they can act as the in-between for long term capital loans either from trust funds or life insurance companies. The first step in the process is the selection of the bank. Banks do not make money by turning down loans; most are actively seeking new depositors and new borrowers. The best source of information is the bank itself. It starts when we make our first deposit. We should inquire into the size and type of loans the bank likes to make. Bank policy is limited by law.

What does the bank look for? The three C's of credit - Character, Capacity, and Capital. Character means the individual moral stability, honesty, dependability, and integrity of the borrower. The only good customers the bank has are the basically honest ones. Does the debtor desire to pay? Is he trustworthy? Investigation of the debtor's character is for the principal purpose of determining the intensity of his desire to meet his obligations to the best of his ability. Capacity is the ability and experience of the loan applicant in his field. He must be a competent

grower. Length of time in business is important. Capital is the means of production at the disposal of the individual. The financial affairs of the applicant should be in good order. Is the debtor able to pay? When will the debtor pay? And can the debtor be forced to pay? Of the three C's, honesty and integrity are absolute. Sound credit analysis is a balanced appraisal of all elements of credit power, but if character is questionable, all other elements lose their significance.

When a bank accepts a borrower's credit, the loan may be either secured or unsecured. So the banker will want personal information about you; information on the business you are in, and he wants information on the loan, what you will do with the money, etc. The banker will need an up to date financial statement; the first part of it is the balance sheet with the three major classifications of 1) assets, current and fixed; 2) liabilities, current and noncurrent; 3) capital and net worth.

Current assets are those assets which will be converted into cash through the normal operation of the greenhouse within the operating cycle that is typical of our trade. For example, the value of your crop presently planted in your greenhouses. Fixed assets do not possess direct paying power. Indirectly, however, by their efficient use and productiveness they do facilitate the creation of the means of meeting obligations. Their real value is their "earning power." Without earning power their value is highly questionable. Current liabilities are due within one year. Fixed liabilities - or noncurrent - should include all obligations of the business to its creditors which are not payable within one year of the date of the statement. These are principally mortgages payable. Capital or net worth is the difference between the total assets and total liabilities and represents the net "debt-paying" power of the debtor.

The second part of the financial statement required is the Profit and Loss Statement or your income statement, which presents the operating results of a fiscal year, a calendar year, or the "natural business period." It shows the resulting net profit or loss for the period. The balance sheet presented at the same time shows the financial condition on one day as of the date of the balance sheet. A typical profit and loss statement includes the following principal sections:

1. Net income from sales,
2. Cost of production,
3. Operating expenses,
4. Other income,
5. Deductions from income, and
6. Net profit or loss.

With the balance sheet and profit and loss statement, the creditor can make an analysis of the condition of the business with the ratio method. For many years the analyst placed great faith in the relationship between current assets and current liabilities of a business. This relationship (the current ratio) of 2:1 came to be accepted as a satisfactory standard.

The three common ratios used are Liquidity Ratio, Capital Ratio, and Profit Ratio. Loans are made on the strength of the general credit rating of the borrower plus his known financial strength and business ability, and his collateral.

## **Build as Cheaply as Possible by Tedo Spano, Arvada, Colorado**

I have property that is increasing in value but I prefer to wait a few years to sell. Part of this land is covered with greenhouses, both of permanent type and plastic film. In order to hold this land until I am ready to sell I feel that I want to cover every spare piece of ground and utilize it to the best of my ability.

I need to expand to utilize more efficiently my labor, management and marketing facilities. Ordinary greenhouse labor can do most of the building and expansion during slack periods. Most of the highly skilled labor needed in costly construction can be eliminated.

In my experience, expansion of my growing area with temporary construction (4 to 10 year life) is my best opportunity. Well designed wood construction covered with soft plastic is easy to build and has been satisfactory. No expense is spared in cooling and heating systems. Gas-fired unit heaters are used in heating. Condensation problems have been reduced in plastic film houses with 24-hour a day air movement and unit heaters. Hail damage can be repaired faster and much cheaper on this type of construction. And most important to me, this type of construction with the best equipment will grow good crops.

Finally, if and when I decide to sell, I can move all my equipment to a new location. I have limited my capital investment, and hopefully recovered it. My taxes have been kept down over the years. When the price of my present land becomes too great, I may move out to cheaper land and start again in the same way.

## **Build Permanent Houses by Neño Spano, S. T. Spano Greenhouses, Arvada, Colorado**

The main reason for building permanent greenhouses is to eliminate maintenance. All greenhouses in this area are basically the same inside. They have raised benches, fan-pad cooling, steam, hot water, or gas-fired unit heaters. The only difference is in the shell itself.

Temporary structures encourage part-time growers, especially with good markets like those the last three years. How do you growers feel about pooling your product with flowers of poorer quality - keeping and stem strength? Is a part-time grower going to help you in the marketing pool, or will we be holding him up because he is growing flowers of lower quality?

The wholesalers do not want to jeopardize their growers who now have large investments in perman-

ent greenhouses. They like to encourage expansion from their present growers. How dependable are these part-time growers and temporary structures?

In comparing costs of structures, I would estimate wood frames will last about 15 years. Cost of materials is around 20 cents per sq. ft. Painting costs about 8 cents and repainting each 5 years about 5 cents. The cover of UV resistant soft plastic is 2 cents per sq. ft. and about the same cost to install, and this has to be done every year. Total cost of the temporary structure can approach that of a permanent structure, especially when recovering and other maintenance is considered.

Pipe frame or galvanized steel with a 30 year life is advertised with 12-year guaranteed fiberglass for around \$1 per square foot. For my part, considering the risk involved and the cost, I would prefer to build permanent, maintenance-free greenhouses.

## Summary

by Ray Kittayama

I think the panel has made an excellent presentation; and whether we want to or not, we are going to have to go through everything that has been said if we are going to expand. Many of you want to enlarge but are limited in your present location, and a new plant start-up is no easy decision or task. Whether you expand or not, or whether you have problems regarding expansion, this panel cannot answer for you. It can only give you its own experience and try to add a little more light to the subject.

For me this move to Colorado has been a challenge more than anything else. In our case, neither the decision nor the effort is mine alone, as I have three brothers who are also involved in this, though I am the one who is actually here to build and manage this operation just getting underway at Brighton.

Most of you have visited our place and know what we are doing. Perhaps our approach may be a little different from yours, but basically there is nothing radical. We are doing it the way we think is the best use of money, people, land and equipment. Although I enjoy this work immensely, I must not forget the basic "return on investment" concept of business.

Ours is also an expansion move, and though the degree and direction may be a little more than you have in mind, we nevertheless have to go through all the things discussed by other panel members. The

problems are the same; only the conclusions may be a little different from those you may reach.

We feel the flower industry offers tremendous opportunities, and in looking ahead I would say that the picture looks brighter today than at any time we can remember. We already have a sizeable greenhouse in California, and we felt a move to Colorado would add more to our total position in the industry and yield us more opportunities in what we want to achieve.

Colorado with its high winter light, relatively mild weather, low humidity, and cool summer nights has much going for it in greenhouse flower production. Air conditioning, fiberglass, and CO<sub>2</sub> have added tremendously to the existing advantages here. This will be one of the areas in this country, along with California and Florida, that will see much more expansion in flower growing in the years to come. You people already here will undoubtedly do much of the expanding, but there is every reason to believe others will come here also. Whether we expand or not, we will be affected by the increase of others; and I am sure that even by 1971, there will be many more flowers produced here than presently but not necessarily by the same people. This total increase will be the result of our individual building of more capacity, or greenhouses in this case.

We are in the midst of change in this industry, and expansion is but one phase of it. In this change management is going to be a big key to success. This is too broad a subject at this time, but I hope that at some later time we can have a management course or seminar for the greenhouse operators, just as the wholesalers and retailers have been having them. We are all going to have to become better and more knowledgeable managers to survive and grow.

Your editor,

