



# Direct Farm Marketing



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# Contents

Fruit and Vegetable Production in Oregon .....	3
Why Establish A Direct Farm Marketing Business .....	3
Types of Direct Farm Marketing .....	3
Roadside market .....	3
Roadside stand .....	3
Direct farm sales .....	4
Consumer harvest—U-pick .....	4
Farmers' markets .....	4
Rent-a-tree farm .....	4
Gift baskets and mail order .....	4
Management Decisions .....	4
What to sell—what to grow .....	4
Promotion techniques to attract and keep customers .....	5
Pricing .....	6
Facilities and site selection .....	7
Maintaining product quality .....	7
Personnel management .....	8
Length of season and hours of operation .....	9
Government regulations .....	9
Financial management .....	10
Appendixes .....	12
Sources of Information on Roadside Marketing .....	18

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# Direct Farm Marketing

In recent years, increasing attention has focused on direct farmer-to-consumer marketing. Direct marketing bypass the middleman and may result in the farmer receiving more for products than through the conventional marketing system. It may also furnish the consumer an opportunity to purchase farm products at lower prices. However, it should be remembered that the farmer and the consumer perform the various marketing functions; it would not be appropriate to expect direct farmer-to-consumer marketing to replace our nationwide food distribution network. It can, however, be an avenue for reduced food costs and increased profits on a local level.

Prior to entering a direct farm to consumer marketing operation, the proposed operator should seek answers to many pertinent questions. Among the many practical questions you need to ask before deciding on a direct marketing venture are: What type of direct marketing should I engage in? What products should I grow and sell? Do I grow enough, or are supplies available from other growers? Will direct marketing fit in with the rest of my operation? Do I have a good location from which to market? What facilities do I need? Do I have adequate facilities? Can I afford to build them? What are the legal constraints? This publication can help you answer these and other questions and help you decide whether or not to engage in a direct farm marketing business.

## Fruit and Vegetable Production in Oregon

Oregon is among the leading fruit and vegetable producing areas in the United States. Most of the production must be processed and/or wholesaled to other areas in order to market the entire production, but the opportunity exists to supply the local consumers and tourists with high quality farm-fresh produce through direct farm marketing.

Americans eat more fruits and vegetables per person than do people in any other country. There has been a small but persistent upward turn in fresh vegetable use per capita during the 1970's. Fresh vegetable consumption has remained around 100 pounds per person. Although Americans are eating less fresh fruit per capita—down from 95.7 pounds in 1959 to 93 pounds in 1975, the demand for fresh fruit is still quite large; recent demand

for "natural" foods has made the fresh market more important. There has also been a tendency for more city residents to directly purchase farm products.

## Why Establish a Direct Farm Marketing Business?

Many consumers are demanding high quality, farm-fresh fruits and vegetables. They have the money and are willing to pay for them. Normal market channels absorb approximately 50 percent of the consumer dollar spent on fruits and vegetables. Therefore, by providing high quality, farm-fresh produce direct to the consumer, the direct marketer may share more of the consumer's fruit and vegetable dollar. By selling direct to the consumer, the farmer can sell at a price near usual retail levels, and attracts customers with the assurance of fresh, high quality produce.

## Types of Direct Farm Marketing

The seven types of direct farm marketing are roadside, roadside stand, direct farm sales, consumer harvest, central farmer markets, rent-a-tree operations, and gift baskets/mail order gifts. These are explained below.

### Roadside market

A roadside market is usually a relatively large, year-round operation. Typically, it is a mini-market that specializes in fresh produce, but may also carry some grocery and other items as well. The owner usually grows a very small portion, if any, of the produce sold. The roadside market is often located in a country setting and/or uses a country decorating scheme to create an impression of selling locally grown produce.

### Roadside stand

Roadside markets are often evolved from roadside stands, which are normally seasonal operations for which the owner grows all or most of the products sold. "Fruit stands," as these markets are often called, vary in size from a few pumpkins under a shade tree to a large year-around facility with a large variety of items for sale.

### **Direct farm sales**

Direct farm sales refers to selling direct to retail stores, institutions (such as rest homes, hospitals, schools, and consumer co-ops), and restaurants. It also refers to peddling. This can be a highly profitable type of operation, but except for sales direct to consumers (as in peddling), the farmer will normally have to settle for a price near the wholesale price level. Of course, high quality and freshness may enable the farmer to price goods somewhat over the prevailing wholesale price when selling to institutional buyers.

### **Consumer harvest—U-pick**

Consumer harvest (U-pick) operations are increasing in popularity. This type of operation lowers harvesting, sorting, packaging, and displaying costs, and also provides the customer with the opportunity to enjoy "farm life" or a country outing. Many consumers make U-pick ventures a family affair to gather products for home processing and to use fresh. There are also reports of consumer groups or co-ops participating in U-pick programs to acquire products for the group.

The principal disadvantages of consumer harvest are the safety aspect and damage to crops by the inexperienced pickers. These can be prevented through appropriate management controls: blocking off areas or area designations, instructions and training for pickers, and posting of rules.

### **Farmers' markets**

Farmers' markets are usually large buildings which have been divided into individual stalls where the individual farmer displays and sells his or her own products. They may be owned and operated by an individual or corporation, a municipality, or cooperatively by farmers. A fee or rent is usually charged for the use of the display stalls. The principle advantage is that it brings a large number of farmers and produce together in one location. Consumers and retailers can select from a greater variety of produce, and they can buy in a central, conveniently situated locale. Some farmers, however, find it inconvenient to transport the produce to the market, and then tend it during operating hours.

A new trend is for farmers to make arrangements with city fathers for use of public lands or parking lots near or adjoining municipal buildings.

### **Rent-a-tree farm**

A rent-a-tree or rent-a-farm type operation refers to consumers who contract for the yield of a certain tree in an orchard, or row of beans in a field. This is a relatively new idea in marketing of

fruit and vegetables in America, but it has been used in Germany and other European countries for 10 to 15 years.

In a typical "rent-a-tree" arrangement, the grower rents a fruit tree to a family for one or more seasons. The renter is free to visit the tree in the orchard and use the orchard as a picnic area as often as desired. Normally, the grower does all the pruning, fertilizing, spraying and other cultural practices to produce the product, and provides ladders and boxes for the renters to harvest their crop.

The main advantage to this operation is that the risk of crop failure is transferred to the renter. Written rental agreements that completely outline the rules, regulations, and terms are a must.

### **Gift baskets and mail order**

Gift baskets and mail order gifts could be a sideline of an existing direct market, or it could be operated on its own. Baskets are made up only on order, but a display of the available baskets and prices is very important. The greatest potential for this type of operation is just before Christmas. It is possible to develop a demand for gift baskets as hospital gifts in place of flowers. Baskets of fruit are popular with persons in business as gifts to employes, or doctors to give to each other. In gift baskets, price is not as important as is quality. The biggest, freshest fruit available, along with cheese wedges or other condiments has proven a good sales gimmick. One large Ohio gift basket marketer reports that his usual markup on a fruit basket is 100 percent. Sometimes, on larger baskets the markup may be even greater.

## **Management Decisions**

Whatever the type of marketing operation, growers must make decisions concerning: What to sell—what to grow, promotion techniques to attract and keep customers, pricing, facilities (location and site selection), maintaining product quality, personnel management, length of season and hours of operation, regulations (federal, state, local), and financial management.

### **What to sell—what to grow**

The wider the variety of produce available at any one time, the greater the number of customers that will be attracted to the market. This brings up the question: Is your direct marketing incidental to your farm operation, or are you going to produce mainly for your own market? If crops are grown mainly for sale in your own market, you

will want to stagger plantings, use different varieties, and grow as many different kinds of produce as possible, in order to increase volume and extend the selling season. The selling season can be lengthened by selling seeds and bedding plants for home gardeners early in the season, and potted flowers for Easter and for Memorial Day. The facility might also be used to sell Christmas trees in December.

The length of selling season, number of different products for sale, and volume of produce available for sale can all be increased by purchasing products for resale. When an owner purchases for resale, there are license requirements. Also, profits may not be as great on products purchased for resale as on products grown by the owner. Product mix is important to any direct selling operation, including consumer harvest operations. Farm processed goods such as cider, jam, jellies, and candy can be highly profitable additions to a roadside market or stand. An operator who is selling fruits and vegetables for home canning and freezing may plan to market canning accessories such as jars, lids, freezing bags, sugar, pectin, or citric acid, as a convenience to the customer. Recent shortages and high cost of some of these accessories has caused consumers to shy away from buying products for home canning and freezing. These items can be advertised at or near cost to entice consumers to your market.

Remember fresh, home-grown fruits and vegetables are the direct marketer's enticement to consumers. What you grow and what you buy to sell aren't nearly as important as the quality of these items.

Some of the higher volume items sold in direct marketing are apples, peaches, strawberries, melons, cherries, tomatoes, sweet corn, green beans, pumpkins, potatoes, squash, and cabbage.

### **Promotion techniques to attract and keep customers**

What makes your market better than any other? What do you have that no other market has? Why should consumers come to you rather than go somewhere else? These questions should be considered when planning promotional activities for your operation. Good courteous service, high quality produce, and reasonable prices will cause the most effective advertising available—"word-of-mouth."

Two other important advertising methods are signs (to attract impulse buying from passing motorists) and mass media (radio, newspaper, and television).

**Signs.** These are an excellent advertising buy, as they can be relatively low cost. There are, however, rules which have to be followed regarding signs:

- The sign cannot be on a state highway right-of-way.
- State permits are required for signs unless they advertise only products for sale which are harvested or produced on the premises where the sign is located.
- Regulations regarding size and spacing (ORS 377.745).
- Local rules and regulations.

A sign is usually the first notice motorists have that your market is ahead. (In a recent survey of customers at an Ohio roadside stand, 75 percent indicated highway signs were the means by which they had learned about the market.) In less than 10 seconds, these silent selling aids must attract attention, tell who you are, where you are, and what you have for sale. The effectiveness of a sign depends upon its appearance, content, visibility, and location.

**Appearance.** Signs should be easy to read and depict a farm-fresh image. Blackboards and messages scrawled in crayon on cardboard should be avoided because they are hard to read and give the impression of a second rate, unprofessional market. Also avoid commercial signs for soft drinks or tobacco which might destroy the farm-fresh image.

**Content.** Signs should encourage the motorist to shop your market. Novelty attracts attention. Listing a variety of products will attract more customers than a sign which merely reads "vegetables." Don't advertise products which aren't in season, or ones that you don't have. Have a distinctive name or trademark for your market and use it on your signs.

Skillful use of symbols (i.e., an apple or ear of corn) may convey ideas better than words. It is unwise to put too much information on a sign as a traveling motorist will be unable to read all of it. Remember, you are attracting customers with fresh, high-quality produce; highway signs are no place to mention prices.

**Visibility.** How far a sign can be seen depends in part upon the colors and size of letters used. The most legible color combinations for roadside markets are bottle green on white, scarlet red on white, black on white, and navy blue on white. Colors should also be selected to contrast pleasingly with the background against which the sign will be viewed and to distinguish it from other distractions.

**Location.** See Tables 1 and 2 in Appendix A for sign criteria in various situations.

**Mass media.** Newspaper, radio and television advertising can be used effectively under some circumstances. They can call customers' attention to products that are in season. It is a good idea, however, to keep a sharp eye on the cost/benefit ratio of radio and television advertising.

A growers association may be able to advertise for its members to get the most out of advertising money.

Many U-pick and roadside stand operations have found it quite worthwhile to have each customer fill out an address card. Then, when the crops are available, the operator sends postcards out to all of these old customers, notifying them that the crop is ready.

### Pricing

The crop has been produced. It has been planted, fertilized, irrigated, sprayed, cultivated, and sometimes harvested. All of these actions have cost money. Now, what is to be the selling price. What is the "correct" price: Wholesale? Retail? This is not an easy question, and the answer varies with the situation. Here are some general guidelines to assist in the determination of the "right" price.

First, know your costs. Add up all your expenses including your labor and management, and fixed costs such as mortgage, interest, and equipment and building depreciation. Then estimate your selling costs. Once you have arrived at your total costs divide by the estimated amount of product to be sold. This will give you your estimated cost per unit. If this cost per unit is more than your selling price, you will lose money.

Decide if you are going to figure your prices on the basis of "markup" or "margin." A margin is a percentage of selling price; a markup is a percentage of cost. A large part of lost profits are due to figuring margins on costs and expenses on selling price. If you believe you have to make 40 percent to stay in business, what are you saying? If you need a 40 percent markup, you put a price of \$1.40 on an item that cost you \$1. If, however, you require a 40 percent margin, the price would be \$1.67. The pricing formulas are:

Markup: Selling price = Cost + percent markup

Cost of goods

Margin: Selling price =  $\frac{\$1}{\text{Desired percent of margin on sales}}$

As a guide, most retail produce departments attempt to operate on a 35 to 40 percent margin.

Know your variable costs. When the crop is ready for harvest, the variable costs consist of harvesting costs and selling costs. Basically, if you can anticipate a price higher than the variable costs, you would harvest your crop. If the expected costs yet to be incurred are more than the anticipated selling price, the wise decision probably is to leave the crop in the field. This is important when considering pricing since at times, due to competition, or oversupply, it may not be possible to sell at a price that will return an overall profit. But, even in this situation, you will probably be able to sell at a price that will cover your variable costs and contribute something toward fixed costs. When considering margins, if a lower margin increases sales to the point that a higher return to fixed costs and profits is realized, the lower margin is more profitable.

The direct farm marketers' main attractions to customers are freshness and quality. Recently, the U.S. Department of Agriculture made a survey of 3,600 households and found consumers bought vegetables for the following reasons:

Ranking	Opinion	% of respondents mentioning
1	Tastes good	90
2	High in vitamins and minerals	72
3	Looks appetizing at table	65
4	Can use in different ways	60
5	Appealing color	57
6	Usually available in store	56
7	Sure of good quality	49
8	Texture good	46
9	Easy to prepare	42
10	Good value for money	39
11	Not too much waste	25
12	Easy to store	20
13	Keep well before cooking	19
14	Low cost per serving	18

To the consumer, pricing is much less important than it is to producers. Know your competition's prices. Remember price wars are costly to all concerned. It may be much more advantageous to compete on the basis of product differentiation rather than on price.

Four pricing systems that can be used are:

- "9's"—There seems to be something psychological about 29 cents versus 30 cents, or 49 cents versus 50 cents, or 99 cents versus \$1. Perhaps the customer feels more is being saved with the "9" figure.

- "5's"—Many farm marketers prefer pricing in multiples of 5 cents since it appears more "farm-like" and less commercial.

- “2 for”—Instead of selling one for 25 cents, sell two for 49 cents. The buyer may see an image of thrift in the “2 for” price strategy.

- “One price” multiple—A product is priced as a single value, but you offer savings with multiple purchases; i.e., tomatoes 39 cents per pound, or 3 pounds for \$1.

Finally, make sure prices are clearly marked. Consumers don't like to have to ask the price. Unmarked prices lead the consumer to think it is dependent on what the seller feels the traffic will bear, or the consumer may feel unmarked prices mean the price is negotiable.

### Facilities and site selection

For operator convenience, low cost, and farm image, it is desirable to have the stand or market on the farm property. This may make it unnecessary to tend the operation continuously, and it doesn't require an out-of-pocket expense for rent. If, however, the farm itself is not suited for direct selling because of location, inaccessibility, or distance from customers, it will be necessary to acquire a facility in a more advantageous location. Some factors to consider when selecting a market location and site are:

- Visibility—Can the market be seen from a distance far enough to allow customers to slow down and safely enter?

- Parking space—Is there adequate space for the expected volume of customers, and can it be safely entered and exited?

- Volume of traffic—At least initially, most of your customers are going to just happen to be passing by on the highway; therefore, the higher the volume of traffic, more customers will stop.

- Side of the road—Studies have shown that a significantly higher percentage of traffic stops at a roadside market which is situated on the right hand side of the road leading into town.

- Distance from population center—The closer the facility is to the population center the more customers it will attract.

- Safety of entrance and exit—Parking should be situated so as to minimize the hazards associated with entering and exiting.

- Speed limit—The slower the potential customers are traveling, the more likely they are to stop.

- Proximity to other roadside stands—Often a group of stands compliment one another.

Size and type of operation planned are the main determinants when considering facilities. Most direct farm marketers will start out small, and expand as customers and volume increase. Facilities that are already available such as barns, sheds, or packing houses, should be considered. It may cost less to convert an old barn to a roadside stand than to build a new facility. Also, unless great care is taken, the new building may destroy the “on the farm” atmosphere that may be important to attract customers. Starting out on a small scale lets you:

- Learn how direct farm marketing suits your temperament and way of life.

- See how direct marketing fits your farm operation, or what changes in farm enterprises and cultural practices may be needed.

- Keep your investment down so losses will be minimized should you decide to give up direct selling.

- Test possible alternate sites for your stand or market to determine which is best for attracting customers and most accessible to your fields, packing house, or cooler.

When the volume of business warrants a larger or better facility than is available, it is a good idea to visit other direct marketing facilities to learn what may be the best facility for your purpose. Plan your market operation first, then plan the building to house the operation. The advice of a reputable architect or store layout consultant prior to building may save you money in construction costs. Some considerations in building design are:

- Ease of operation and labor requirements.
- Cost of construction.
- All weather operation.
- Appearance—farm image.
- Ease in altering or relocating displays.
- Customer convenience and safety.
- Low cost expansion later.
- Storage requirements including refrigeration.
- Water supply and sanitary facilities.
- Preparation area.
- Security.

### Maintaining product quality

Since the direct marketer desires to compete with other outlets on the basis of freshness and quality rather than price, the maintenance of produce in the highest possible quality is a necessity. When oxygen combines with plant sugars, carbon dioxide and heat are given off. This process of respiration is continuous in all fruits and vege-

tables, but is faster in peas, corn, berries, and peaches. To cope with the problem of rapid decay or perishability, the operator must be acquainted with temperature and moisture control, and proper handling techniques.

Refrigeration is the best way to control respiration rates in fresh fruits and vegetables. Sweet corn held at 70° F for one day will change over half of its sugar to starch. If held at 32° F, the corn will lose only about 5 percent of its sugar in one day. Appendix B contains guidelines for the temperature and moisture control of most fresh fruits and vegetables. These are not absolute conditions, but general limitations. Some products, however, must be kept at these temperatures: Bananas, cucumbers, eggplant, okra, pumpkins, squashes, sweet potatoes, and tomatoes.<sup>1</sup>

In addition to temperature and moisture control, perishability problems require great care in harvesting to prevent cuts and bruises where decay can start. It may be necessary to harvest some crops such as tomatoes, melons, and pears in a firm, almost ripe stage to enhance storage life and quality.

Production control and inventory turnover are necessary to insure premium quality. A bargain price may be used to rapidly sell products that are approaching maximum storage time, and are showing decreased quality. It may be well to have a markdown table or counter.

Attention should be given to the pre-cooling requirements for the more perishable commodities listed in Appendix B. Some methods of pre-cooling are: Rapidly moving cold air, hydro-cooling (flooding or immersing in cold water), and contact ice or top ice.

Humidity control is important to prevent loss of moisture from the product. Storage of mixed commodities is sometimes a problem even when temperature and humidity requirements are the same. With some products there is a cross-transfer of odors. Also, volatiles such as ethylene are emitted by some products that may be harmful to others. Some guidelines for storing mixed commodities are:

- Deciduous fruits can generally be stored together if they have the same temperature and humidity requirements.

- Apples or pears should not be stored with celery, cabbage, carrots, potatoes, or onions.

- Celery should not be stored with onions or carrots.

- Citrus fruits should not be stored with any of the strongly scented vegetables.

- Odors from apples and citrus fruits are readily absorbed by meat, eggs, and dairy products.

- Pears and apples acquire an unpleasant earthy taste and odor when stored with potatoes.

- Onions, nuts, citrus fruit, and potatoes should each be stored separately.

- Lettuce and carrots are damaged when stored with apples, pears and many other fruits and some vegetables since these products give off ethylene gas.

- Cucumbers, peppers, and acorn squash, in which retention of green color is desirable and which need to be stored at 45 to 50° F should not be stored with apples, pears, tomatoes, or other ethylene-producing products.

See Appendix B for a produce quality control reference table. Some varieties of some produce items require different storage conditions than other varieties. For items not listed, your county Extension agent or Experiment Station may be able to provide the required information.

Pest control before and after harvest is extremely important to product quality. Flies and fruit flies in and around the selling area not only look bad, but they are a detriment to product quality.

### Personnel management

Operating a direct-farm market can be a 12 hour per day, 7 day per week operation. Therefore, supplemental labor may be required in addition to family labor. The profitability of a direct farm market may well depend on the manager's ability to properly-manage hired labor. Some sources of hired labor are:

- Present employees may refer prospective employees. This may be a good source since your employees know the business and the type of person you are looking for.

- Newspaper advertising can be used, but has some distinct disadvantages. There is no screening of applicants before they contact you, so you may spend a good deal of time interviewing unqualified applicants. Also, you may be deluged with qualified applicants and it may take more time to make a decision on whom to hire.

- Neighbors are usually available, and may fit into the operation better than other outside help.

- State or private employment agencies can provide you with prescreened applicants. This saves time in wasted interviews.

<sup>1</sup> USDA, The Commercial Storage of Fruits, Vegetables and Florist and Nursery Stocks. Agricultural Handbook No. 66.

- For part-year peak periods, high school and college students are usually available. Many customers like to buy from students who are working their way through school.

- School teachers may also be available for summer seasonal employment. They are well-educated and are usually comfortable dealing with the public.

- Retired persons may be a good source of seasonal labor. They are normally very responsible and enjoy dealing with customers.

When attempting to obtain hired labor, it is first important to define the job and the skills needed to perform the job. Then describe the characteristics of the person you are looking for to fill the job. Once a job is advertised, each person who has submitted an application should be equally considered. Interviewing time can be saved by having each prospective employee fill out a written employment application. Only those individuals who meet your criteria need be interviewed. A decision should not be made as to who to hire until all qualified applicants have been interviewed.

Once hired, employees need to be trained in the job they are to perform. Don't make the assumption that the employee will immediately be able to perform in the manner you expect. Time spent training the individual will pay dividends later. One of the most important aspects of a training program is customer relations. A person who drives customers away can ruin an operation, while one that attracts customers back to the market can make the business.

Keep your employees informed. They need to be included in most plans that affect the operation. Also, expect to pay wages commensurate with value. You won't be able to retain good employees unless wages are reasonable. It may be acceptable to start an individual at a relatively low wage, but periodic raises should be considered necessary as experience and output increase. It may be an advantage to offer a bonus or profit sharing program to employees as an incentive to keep sales up and costs down. Employees should be encouraged to ask questions and to offer suggestions. This makes them feel appreciated and part of the team.

### **Length of season and hours of operation**

The length of season is determined by the length of time you have products to sell. If you are selling only produce grown on your farm, the selling season will be determined by the type of produce grown and the storage facilities available. Length of season can be increased by varying

planting dates and varieties so as to have a steady stream of products over a period of time. It can also be increased by purchasing products for resale when produce from the farm is not available. There is no set formula for deciding the "best" length of season; the decision has to be made on careful analysis of costs and revenues achieved through various methods of lengthening or shortening the season.

Hours of operation depend on the volume of traffic during various hours of the day, and on the amount of product available for sale. Many small stands and U-pick operations are only open on weekends when the volume of traffic is highest. Others may open at noon and stay open until 10 p.m. Careful analysis should be made as to the cost-revenue ratio of various hours of operation. An operator should try to discover (possibly by experimentation) what the best hours of operation are for the market, in the chosen location.

### **Government regulations**

Regulations and legal requirements for roadside markets and other direct marketing operations vary among counties and cities in Oregon. They also vary depending whether or not the products sold are produced on the property where the stand is located. The following are some of the areas in which laws have been enacted. Each marketer should check with local, state and federal authorities regarding laws which affect the business.

**Zoning laws.** Virtually every parcel of property in Oregon is covered by zoning laws. These laws outline what a particular piece of property may or may not be used. Usually, these laws permit construction and operation of a stand on the grower's property. Building permits are required in most areas to insure compliance with building codes. Contact the local planning commission for information on zoning restrictions in your area.

**Insurance.** Some areas require a business which is open to the public to carry adequate liability insurance. Even if it is not required it would generally be foolish to operate without liability insurance. Consumer harvest operations are particularly vulnerable to liability resulting from injuries to customers.

A regular farm or homeowner's liability policy probably isn't adequate for a direct marketing operation. Liability insurance will protect you from the costs resulting from a customer being injured on your property. Other forms of liability protection suggested are: Chemical residue on fruits and vegetables, protection from false accusation of shoplifting, and protection from liability for employees offending or defaming customers.

**Grading and labeling laws.** The Oregon State Department of Agriculture, Plant Division, enforces licensing, grading, and labeling laws in the state. Generally, a grower can sell retail or wholesale without a peddler's or wholesaler's license. There are some restrictions from "Green River Ordinances" on peddling door to door in some cities; these restrictions also apply to growers. A permanent business in a permanent building, non-mobile, and selling only at retail is not required to have a license from the Plant Division. However, wholesale produce dealers, cash buyers, and retail produce peddlers are required to be licensed. The only dealers who can legally sell wholesale in Oregon are growers, licensed wholesale produce dealers, and licensed cash buyers.

The Plant Division makes periodic, unannounced inspections of retail and wholesale produce dealers for violations of grade or labeling laws. There are certain grade and labeling standards for each commodity. A complete up-to-date list of these standards can be obtained from the Oregon Department of Agriculture, Plant Division, or your local Extension agent.

**Sanitation.** Oregon Revised Statute 23-316 outlines sanitation requirements for retail food establishments. Prior to opening business, an operator should have a copy of this law to ensure compliance.

**Marketing orders.** These are rules set up by an industry as an aid to marketing their product. Many fruits and vegetables are covered by marketing orders, and a seller must know what the restrictions are. These orders usually regulate grade, size, and/or maturity of a commodity. They may also regulate the amount of a commodity made available at a certain time. Some items covered by marketing orders in Oregon are: Potatoes, filberts, walnuts, Bartlett pears, winter pears, cranberries, onions, and prunes. Any questions regarding marketing orders can be directed to your county Extension agent, Oregon State University, or the Northwest Marketing Field Office of USDA, Portland, OR 97204.

**Federal minimum wage.** The effect this law has on your business will depend upon whether your operation is classified agriculture. If you sell only produce you grow and gross annual sales are less than \$250,000, you probably aren't covered by this law. Any questions regarding this law should be directed to the U.S. Department of Labor, Wage and Hour Division, OR 97204.

**Social Security.** Old age retirement benefit provisions apply to any worker who earns \$150 or more in your employment, or works at least 20 days

for you. On any covered employee, you are required to withhold a percentage of paid wages, and you are required to contribute a matching amount. If you have employees who have or will earn more than \$150 you must apply to the nearest Internal Revenue Office for an identification number. When you apply, the IRS will provide you with all the necessary information regarding percentages to be paid and filing procedures.

**Federal income tax.** Generally, an employer must withhold federal income tax on any employee who earns more than \$600 during a calendar year. The employer must issue those employees a Form W-2 stating total wages and withholdings for the year. Complete information regarding withholding and filing requirements can be obtained from the nearest Internal Revenue Service office.

**OSHA.** The Federal Occupational Safety and Health Act of 1974 requires employers to furnish a place of employment free from recognized hazards that could cause serious physical harm or health impairment. Records must be kept as required by the act, and you must comply with the safety and health standards established by the act. Oregon has assumed the enforcement authority of OSHA from the federal government.

Periodic inspections are made by the state inspectors to ensure compliance with the act. Employers are required to allow the inspectors access during reasonable times without delay to carry on an inspection.

**Employees under age 16.** Persons under age 16 may be employed by their parents in any farm occupation owned or operated by their parents. The U.S. Department of Labor prohibits other youngsters under 16 from performing farm operations considered to be hazardous. These include operating a tractor over 20 belt horsepower, operating or riding a corn picker, vegetable harvester, or dump wagon, and working from a ladder at a height of more than 20 feet. There are many other prohibited tasks; if there is doubt, check with the State Department of Labor.

**Sign laws.** Local sign regulations and state requirements can be obtained from your local zoning office. There are numerous restrictions to the placement, size, location, and type of signs used. Before placing a sign, make sure it is in compliance with the sign laws.

### **Financial management**

The success or failure of your direct marketing operation may well depend on your financial management. If properly maintained, detailed, accurate records can be helpful in making financial decisions.

The first financial step in planning a new business should be the formulation of a budget. This will tell you if expected income will be sufficient to cover all expected expense and leave a profit. Start with a realistic estimate of sales. Population, distance from population, variety of produce, competition, quality of produce, quantity of produce available for sale, and the amount of traffic passing your location must be considered when estimating potential sales. Expenses including insurance, depreciation, utilities, labor, and others must be estimated using the best information available.

Also include an allowance for the owner-manager's salary and return on owner's investment. These two allowances may be based on the opportunity cost for these items. That is, allowance should be made for what the manager would earn if paid by someone else to do the job, and the amount of interest the owner could earn on the investment if it were in the bank—this can be used for the allowance to capital. A sample budget is in Appendix C.

**Profit and loss statement.** This statement is an operating budget "after-the-fact." It tells how much profit the operation earned during the month, quarter, year or whatever time period it covers. Previous month's profit and loss statement may be used as next month's budget. A sample profit and loss statement is shown in Appendix D.

**Net worth statement or balance sheet.** This statement is a picture of the operation's assets, liabilities, and net worth at a certain time. In a sense, it is a periodic health report on this business. A sample balance sheet is shown in Appendix E.

**Break-even analysis.** This can be used to determine selling prices. This analysis describes the price at which a product must be sold to just cover all expenses. A sample break-even problem is worked out in Appendix F.

## Summary

An opportunity for small farmers to increase their share of the local consumers' food dollar by selling direct from farm to consumer may exist. A well-managed direct marketing operation may yield the operator a good profit. This publication has attempted to eliminate the reader from trial and error to by presenting the facts on direct farm marketing. It does not include all the information needed to operate a business.

Answers to specific questions should be solicited from your local county Extension agent, the fruit and vegetable marketing specialist at Oregon State University, or the State Department of Agriculture. In some instances, local policing agencies or the county clerk's office can answer legal questions that may arise.

# Appendixes

## Appendix A

**Table 1. Content, Visibility, and Letter Size of Roadside Market Signs.**

Maximum number of words on sign (Number of words which can be read by the average motorist traveling at various speeds*)				Distance from which sign must be visible to be fully read**	Minimum letter height***
30 mph	40 mph	50 mph	60 mph	Feet	Inches
4	2	1	0	50	1½
8	5	4	3	100	3½
15	11	8	6	200	7
22	16	13	10	300	11
30	22	17	14	400	14
38	28	22	18	500	17½

\* This assumes the reader gives full attention to the sign, has normal visual acuity (20:20) and is able to read and comprehend at the rate of 200 words per minute. Use posted speed limits as the guide to the speeds at which motorists travel unless more accurate information is available.

\*\* Be sure there are no obstacles this far in front of sign.

\*\*\* Letters should be made using lines at least 1/5 as wide as the letter height. For example, letters 11 inches in height should be made with lines about 2¼ inches wide.

### Location of advance signs

Deciding to stop at a market takes time. Bringing the car to a stop takes more time. When a motorist is traveling 50 miles per hour, each second carries the car 73 feet closer to your market. Give your customers adequate time (and distance) for making the decision to stop, and actually bringing their cars to a stop. Source: Ransom Blakely, "The Sign of a Good Market," Purdue University.

**Table II. Advance Sign Locations for Various Speed Zones.**

Speed limit (miles per hour)	Minimum distance from advance sign to market*
30	2/10 mile
40	1/4 mile
50	3/10 mile
60	4/10 mile

\* Based upon a decision time of 20 seconds plus reaction times and braking distances for a car in good condition on a dry, paved highway. Reaction time and braking distances obtained from *Sportsmanlike Driving*, third edition, published by the American Automobile Association, Washington, D.C.

## Appendix B.

### Produce Quality Control Reference Table

Item	Best temperature (degrees F)	Freezing point (degrees F)	Preferred humidity (percent)	Sprinkling desired	Desired characteristics
Apples	30 to 32	29.3	90	None	Colorful, uniform, bruise-free
Apricots	31 to 32	30.1	90	None	Plump, firm
Artichokes	32	29.9	90 to 95	Lightly	Bright color, firm
Asparagus	32 to 35	30.9	95	Lightly	Wilt-free, uniform
Avocados	40 to 55	31.5	85 to 90	None	Smoothness, bruise-free
Bananas	56 to 58	30.6	90 to 95	None	Uniform, mold-free, bright color
Beans, snap	40 to 45	30.7	90 to 95	Lightly	Crisp, uniform, immature
Beans, lima	32 to 40	31.0	90	Yes	Clean, well-filled, dark green
Beets	32	31.3	95	Yes	Small, smooth, firm

Appendix B  
Produce Quality Control Reference Table—Continued

Item	Best temperature (degrees F)	Freezing point (degrees F)	Preferred humidity (percent)	Sprinkling desired	Desired characteristics
Berries	31 to 32	29.7 to 30.6	90 to 95	None	Bright, clean, plump
Broccoli	32	30.9	90 to 95	Lightly	Cloud buds, clean, dark green
Brussel sprouts	32	30.5	90 to 95	Yes	Hard, clean, compact
Cabbage	32	30.4	90 to 95	Yes	Hard, heavy, bright color
Carrots	32	29.5	90 to 95	Lightly	Firm, uniform, well-colored
Cauliflower	32	30.6	85 to 90	Lightly	White, clean, compact curd
Celery	32	31.1	90 to 95	Yes	Medium size, crisp, colorful
Cherries	30 to 32	29.0	90 to 95	None	Bright, plump
Collards	32	30.6	90 to 95	Yes	Fresh, immature, colorful
Corn	32	30.9	90 to 95	Yes	Bright, plump, milky kernels
Cranberries	36 to 40	30.4	90 to 95	None	High lustre, firm, plump
Cucumbers	45 to 50	31.1	85 to 95	None	Green, well-shaped, firm
Dates	0	3.7	70 to 75	None	Golden brown, slightly moist
Eggplant	45 to 50	30.6	90	Yes	Heavy, rich color, scar
Endive-escarole	32	31.9	90 to 95	Lightly	Fresh, immature, colorful
Figs	31 to 32	27.6	85 to 90	None	Fairly soft, uniform
Grapefruit	50 to 60	30.0	85 to 90	None	Springy touch, heavy
Grapes	30 to 32	29.7	85 to 90	None	Plump, mature, fresh
Kale	32	31.1	90 to 95	Yes	Fresh, immature, colorful
Leeks	32	30.7	90 to 95	Yes	Fresh, uniform, clean
Lemons	40 to 50	29.4	85 to 90	Lightly	Bright, heavy, fine texture
Lettuce	32	31.7	95	Lightly	Clean, crisp, tender
Melons	32 to 50	31.3	85 to 90	None	Mature, fine texture
Mushrooms	32	30.4	90	None	Clean, white, wilt-free
Nectarines	31 to 32	30.4	90	None	Plump, well-colored, firm
Onions, dry	32	30.6	65 to 70	None	Hard, bright, dry
Onions, green	32	30.4	90 to 95	Lightly	Green, fresh, clean, uniform
Parsnips	32	30.4	90 to 95	Yes	Smooth, clean, medium size
Peaches	31 to 32	30.3	90	None	Bright, fresh, yellow back-ground
Peas	32	30.9	90 to 95	Lightly	Tender, young, sweet
Pears	29 to 31	29.2	90 to 95	Lightly	Firm, unbroken skin, wilt-free
Peppers	45 to 50	30.7	90 to 95	Lightly	Fresh, green color, firm
Persimmons	30	28.1	90	None	Resemble plump, ripe tomato
Plums, prunes	31 to 32	30.5	90 to 95	None	Full colored, plump, slightly soft
Potatoes <sup>1</sup>	45 to 70	30.9	85 to 90	None	Smooth, sound, firm
Pumpkins	50 to 55	30.5	70 to 75	None	Hard, blemish free
Radishes	32	30.7	90 to 95	Yes	Mild, bright, smooth
Rhubarb	32	30.3	95	Yes	Crisp, bright, stout
Spinach	32	30.0	90 to 95	Yes	Fresh, immature, colorful
Squash, summer	32 to 50	31.1	90	Lightly	Crisp, heavy, tender
Squash, winter	50 to 55	30.5	50 to 75	None	Hard, blemish free
Sweet potatoes	55 to 60	29.7	85 to 90	None	Bright, solid, well-shaped
Tomatoes, unripe	55 to 70	31.0	85 to 90	None	
Tomatoes, ripe	45 to 50	31.1	85 to 90	None	Plump, bruise-free, firm, uniform red color
Turnips	32	30.1	90 to 95	Yes	Heavy, smooth, firm
Watermelons <sup>1</sup>	40 to 50	31.3	80 to 85	None	Mature, well shaped

<sup>1</sup> See reference handbook for variety differences.

# Appendix C Projected Profit and Loss Statement

<i>Sales</i>	<i>First year</i>		<i>Second year</i>	
Cost of goods sold .....	\$ .....	100%	\$ .....	100%
Gross margin .....	.....	.....	.....	.....
Business expense				
Rent .....	.....	.....	.....	.....
Wages .....	.....	.....	.....	.....
Payroll taxes and fringe benefits .....	.....	.....	.....	.....
Advertising and promotion .....	.....	.....	.....	.....
Salaries .....	.....	.....	.....	.....
Insurance .....	.....	.....	.....	.....
Depreciation .....	.....	.....	.....	.....
Repairs and maintenance .....	.....	.....	.....	.....
Taxes, licenses and fees .....	.....	.....	.....	.....
Accounting and legal fees .....	.....	.....	.....	.....
Telephone .....	.....	.....	.....	.....
Utilities .....	.....	.....	.....	.....
Supplies .....	.....	.....	.....	.....
Transportation .....	.....	.....	.....	.....
Other .....	.....	.....	.....	.....
Total expenses .....	\$ .....	.....	\$ .....	.....
Net profit ( before taxes ) .....	\$ .....	.....	\$ .....	.....

Appendix D  
**Sample Profit and Loss Statement**  
**ABC Roadside Stand**  
**January 1-December 31, 19\_\_**

<b>Income</b>		<b>Percent</b>
Retail sales at market .....	\$41,366.88	92.6
Wholesale sales from market ( to other markets ) .....	<u>3,309.35</u>	7.4
Total gross sales .....	\$44,676.23	100.0
Less refunds and allowances .....	<u>-44.90</u>	.1
Total net sales .....		\$44,631.33 99.9
 <i>Cost of Merchandise Sold</i>		
Wholesale value of produce grown for market .....	\$26,006.97	57.9
Wholesale purchases from others .....	<u>1,266.15</u>	2.8
Total cost of merchandise sold .....	<u>\$27,273.12</u>	60.7
Gross profit on market operations .....		\$17,358.21 39.2
 <i>Expenses</i>		
Labor hired .....	\$ 2,572.02	5.7
Salary allowance for family .....	6,600.00	14.7
Supplies .....	1,199.71	2.7
Building depreciation .....	1,276.00	2.8
Equipment depreciation .....	306.29	.7
Utilities .....	332.38	.7
Maintenance .....	131.93	.3
Advertising .....	264.32	.6
Insurance .....	60.50	.1
Taxes, licenses, and fees .....	643.50	1.4
Other .....	<u>38.19</u>	.1
Total expenses .....		\$13,424.84 29.9
Net profit on market operations .....	\$ 4,159.37	9.3
Interest cost ( mortgage and loans ) .....	<u>704.00</u>	1.6
Net profit before income taxes .....		\$ 3,455.37 7.7

Appendix E  
**Sample Balance Sheet**  
**ABC Roadside Stand**  
**December 31, 19\_\_**

**Assets**

**Current assets**

Cash on hand .....	\$ 128.30	
Bank-checking .....	900.45	
Accounts receivable .....	<u>34.00</u>	
Total current assets .....		\$ 1,062.75

*Fixed assets*

Land (market site) .....	\$ 3,000.00	
Building (less depreciation) .....	11,000.00	
Equipment (less depreciation) .....	<u>1,500.00</u>	
Total fixed assets .....		\$15,500.00
Total fixed and current assets .....		\$16,562.75

**Liabilities and Owner's Equity**

*Current liabilities*

Wages payable .....	\$ 60.00	
Accounts payable .....	129.30	
Notes payable (equipment) .....	<u>400.00</u>	
Total current liabilities .....		\$ 589.30

*Fixed liabilities*

Building mortgage payable .....	\$ 7,500.00	
Total fixed liabilities .....		\$ 7,500.00
Total current and fixed liabilities .....		\$ 8,089.30

*Owner's equity*

Equity on January 1, 19__ .....	\$ 6,500.50	
Net profit for current years (after taxes) .....	<u>1,972.95</u>	
Total owner's equity, Dec. 31, 19__ .....		\$ 8,473.45
Total liabilities and owner's equity .....		\$16,562.75

## Appendix F

Break-even analysis is a method for determining the volume of produce a roadside stand must sell to break-even and begin to make a profit. It is a powerful tool and should be used by all operators when pricing commodities for sale.

The basic step in break-even analysis is to understand the two types of costs associated with the business: *fixed* and *variable*.

*Fixed costs* exist whether or not you sell any merchandise. These obligations must be paid regardless of sales and very frequently must be paid in cash. Taxes, insurance, salary, interest, basic utility costs,\* advertising, and depreciation are fixed costs.

Price is the basic tool used to cover your fixed and variable costs and give you a profit or loss.

Now let's put price, fixed cost and variable cost together, and see if we can understand the relationship between the level of fixed costs, variable costs, prices and profits.

Let's assume the following: We have a single commodity stand, we have fixed cost of \$300 per week, and we establish a price of 25 cents per pound for the commodity we sell. Based upon the foregoing, we sell one pound of commodity for 25 cents. The first pound sold generates 25 cents, which will cover the variable costs of the commodity (15 cents) and will contribute 10 cents to the \$300 fixed costs. The contribution of 10 cents to overhead is called C.T.O. The second pound sold will add another 10 cents to fixed costs and so on for each pound sold.

Now then, we want to know how many pounds we must sell each week to exactly cover all costs. Since each pound that sold for 25 cents covered variable costs of 15 cents and contributed 10 cents to fixed costs or overhead, then we can determine volume of sales needed by dividing fixed costs by that amount of money contributed to fixed costs by each unit sold, i.e.  $\$300 \div \$1.10 = 3,000$  pounds, meaning a stand must sell that amount before making one cent profit, or this 3,000 units sold is the break-even point (income received just covers all costs).

The above example works in a market that sells many products almost as easy as if you consider the *margin* you make on each dollar of sales. For instance, let's further assume that each item you sell is priced so that you make a 40 percent margin. This means, that for every dollar of sales, 60 cents or 60 percent goes for the cost of good, variable operating costs, and the remaining 40

cents, or 40 percent is for covering overhead and profit. Therefore, it should be a simple matter to calculate the amount of sales you must make to break-even (B.E.).

$$\text{Formula: B.E.} = \frac{\text{Fixed costs}}{\text{C.T.O.}} = \frac{\$300}{\$1.10} = \$750 \text{ sales}$$

Should you cut your prices and sell at a 30 percent margin, then C.T.O. becomes 30 cents of every dollar of sales, so:

$$\text{B.E.} = \frac{\text{Fixed costs}}{\text{C.T.O.}} = \frac{\$300}{\$1.30} = \$1,000 \text{ sales}$$

This shows what happens when you change your margins or prices. If by lowering your margins you can increase your sales by more than enough to offset the lower C.T.O., then it may pay you to do so. On the other hand, a higher margin and higher C.T.O. may generate greater profit due to lower B.E., even though total sales are less than at a lower margin. However, you should be sure of the likely results before you change prices too much.

By treating a desired profit level as a fixed cost, you can determine the volume of sales needed to reach your profit goal. For example, suppose you want a profit of \$100 per week with a 40 percent margin. Formula to use:

$$\text{B.E.} = \frac{\text{Fixed costs and desired profit}}{\text{C.T.O.}} = \frac{\$300 + \$100}{\$1.40} = \frac{\$400}{\$1.40} = \$1,000 \text{ sales}$$

Break-even sales volume is to accomplish your profit goal and cover all costs.

It is helpful if roadside stand operators have a definite goal in mind as to what the gross dollar volume of business should be and with markups planned to produce that goal. Historically, markups in successful produce departments have been as follows: 35 percent on root and green vegetables, 25 percent on deciduous fruits, and 30 to 35 percent on berries, with an overall aim within the department of 25 to 35 percent. Another way to determine the selling price would be to take the cost of the goods divided by 100 minus the desired percent of margin on sales.

As an example, what is the selling price (S.P.) for an item that cost \$1.25 if a desired margin is 30 percent?

$$\text{SP} = \frac{\$1.25}{\$1 - .30} \text{ or } \frac{\$1.25}{\$1.70} = \$1.786 \text{ or } \$1.79$$

Always keep in mind a *margin* is a percent of the selling price and a *mark-up* is a percent of the cost of the item.

\* Basic meter charge = fixed; hours stand is open will influence additional utility costs = variable.

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