

# MANAGING VEGETABLE PRODUCTION RISKS

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## RISK MANAGEMENT

*Protecting Vegetable Crop Investments  
Planning Now for Protection Later ---  
Today and Always...*

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## **ATTACHMENTS**

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## INTRODUCTION

*‘Risk has always been part of agriculture, and protecting nursery crop investments through risk management is a bigger factor today than ever before.’*

Representing an economic entity, as well as way of life, the vegetable producer has one of the most complex businesses to manage. Reevaluating goals is not only viable to the continuation of a family nursery business, but sentimentally important as well. Current year objectives, crop year strategies, and long term goals are vital for the preservation and financial stability of a vegetable farm business.

*Weather patterns and nursery markets* may not always be cooperative, but the blessings of fresh air, warm sun, cool rain, fertile soil and clean water are some of nature’s most precious gifts. Just as conservation of the land is important for future generations, developing a risk management plan can be just as significant. Possibly one of the best gifts we can give future generations is establishing the value of sound nursery management plan, through *risk management strategies*.

**Risk** is the possibility of adversity or loss and refers to “uncertainty that matters.” Understanding risk is a starting point to help producers make good management choices in situations where adversity and loss are possibilities.

**Risk Management** involves choosing among alternatives that have uncertain outcomes and varying levels of expected return. For an individual vegetable grower, risk management involves finding the preferred combination of activities with uncertain outcomes and varying levels of expected return. Risk Management involves choosing among alternatives for reducing the effects of risk, and in so doing, affecting the farm’s welfare position. Because all farm producers vary in their attitudes toward risk and their ability to address risky situations, risk management cannot be viewed with a “one size fits all” approach.

In vegetable farming, production risk comes with the business and protecting your agricultural business investments by making an informed risk management decision is a bigger factor today than ever before. Fortunately though, vegetable growers today have more and better tools to help them manage risks or, at least, to manage certain kinds of production risks. Crop insurance cannot guarantee that unfavorable weather will not damage or destroy a vegetable producers crop, but it can guarantee if they lose a crop, he/she will not stand to lose the money invested in the crop. Conservation, new technology practices, varied farm production methods (organic, sustainable) and chemicals to combat crop-eating insects are other examples of some of the present-day tools to manage risks.

Successful farm management depends on taking risks consistent with the goals and financial position of the business. Vegetable growers are aware that agriculture is a business where they stand to lose more money in a bad year than they stand to make in a good year. Accordingly, producers recognize that in order to manage production risks, they must increasingly use all the different management tools available to them.

The objectives of this module are:

- various sources of production risk associated throughout the vegetable industry;
- sources of production risk that affect the farm business when alternative actions or plans may be implemented; and
- various production risk management strategies (including crop and revenue insurance) that might be adopted to control or counteract production risk.

Appendices to this section are curriculum fact sheets, data sheets, and USDA program materials. They are efficient and easy-to-use references for vegetable growers. They also can serve as the primary teaching aid for a specific topic or as a follow-up/handout for a specialty crop producer to use when covering a topic during a discussion, meeting, training or workshop with fellow employees.

New, additional, and updated fact sheets continue to be developed and are available, upon request from USDA/Risk Management Agency/Spokane Regional Office, Jo Lynne Seufer, at telephone number 1-509-353-2147.

## **SOURCES OF PRODUCTION RISK**

### **Technology and Crop Production Practices**

Some amazing things are going on in field technology and most horticulturists are excited about the introduction of cutting edge strategies and technologies. For any new technology, vegetable growers need to estimate the expected costs and benefits for their operation and have a set of criteria they use for their decision as to use it or not. Risks may be reduced with new technology, but a higher level of management and individual analysis for each operation may also be necessary.

There is a lot of technology a vegetable grower may use every day without so much as a second thought – personal computers, cell phones, palm pilots, and answering machines. The Internet has been one of the highest-profile technological developments, providing an instantaneous link to just about anyone or anything, including specialty crop producers and suppliers who have established web sites to market their products. E-commerce, which allows buyers and sellers to complete transactions online, also allows growers to ask questions and share important information through e-mail and Internet discussion groups. Grower adoption of the Internet as a marketing, educational, and communication tool continues to grow faster every day.

As a tool for PRODUCTION RISKS, the Internet can provide a grower with direct links to Research Centers and Land Grant University personnel. Simple online programs that assist with the identification of diseases, insects, chemical injury, and physiological disorders are continuing to be developed to find out what is causing symptoms in a vegetable crop. In this process, the grower answers a set of questions, such as the leaf color, then if it is yellowing and the location of the yellowing. The ending result can lead to photos and any possible solution for the grower.

Growers with Internet access may also want to consider visiting the AG Weather service's Strategic Weather Services web site that offers specialized weather products for the energy and agricultural industries worldwide. For 800 unique weather graphics, text reports and data products, go to [www.weathermarkets.com](http://www.weathermarkets.com).

Computer software is also making life easier for growers. Predictive models use information (degree days or leaf wetness) collected in the field by data-logging devices to indicate when insect or disease outbreaks are likely. Business software handles everything from production inventory to credit reports to payroll. Harvested production can now be recorded through portable data collection tools (a hand-held computer which tracks almost every labor related activity in the field, from pieces harvested to productivity by the employee). Earlier systems used button probes to record information, but an emerging new technology is the bar code system.

Digital cameras are also a useful new technology tool. A picture of a plant sample can be taken and then transmitted by a cellular modem to a research site, which can download the transmission and provide answers to a grower the same day. Vegetable growers can also take pictures of their farm product(s) and place them on their web site as a selling tool 'available to pick tomorrow.'

### **Sustainable Agriculture**

Sustainable agriculture for a vegetable grower producing field-grown vegetables is a method of farming that can be carried out for generations to come. This long-term approach to agriculture combines efficient production with the wise stewardship of the earth's resources. The USDA Sustainable Agriculture Research and Education (SARE) program defines sustainable agriculture as an integrated system of plant and animal production practices having a site-specific application that will, over a long term:

- Satisfy human food and fiber needs;
- Enhance environmental quality and the natural resource base upon which the agricultural economy depends (protect the natural resource base and prevent the degradation of soil, air and water quality);
- Make the most efficient use of nonrenewable resources and on-farm commodity resources and integrate, where appropriate, natural biological cycles and controls;
- Sustain the economic viability of a vegetable farm's operation; and
- Enhance the quality of life for all of agriculture and society as a whole.

The most important link between all farming practices (including vegetable production) and sustainable agriculture is the health, or quality, of our agricultural soils. If soil becomes degraded, more resources in terms of time, money, energy, and chemicals will be needed to produce less-abundant crops of lower quality, and the goals of sustainable agriculture will not be met. On the other hand, if soil degradation is reversed and soil health is maintained or improved by using appropriate specialty crop farming methods, sustainable agriculture can be a reality. The approach a vegetable grower decides to take as they manage these tough issues has come to be known as sustainable agriculture.

Sustainable agriculture does not refer to a prescribed set of practices. Instead, it challenges vegetable producers to think about the long-term implications of their practices and the broad interactions and dynamics of agricultural systems.

Vegetable crop farming methods that improve the sustainability of one vegetable crop (or even specific variety) may not be appropriate for a different vegetable or specific region. Each practice must be evaluated in a given farming system for its ability to achieve a set of economic, environmental and social goals. However, we can look to changes adopted by specialty crop producers across the country (with some demonstrating an increased diversification of crop and/or specific variety of a crop), and justify how a better utilization of on-site farming resources (such as crop residue) is an extremely effective tool. These changes and many other alternative approaches are contributing to the goals of lasting specialty crop production, stewardship of land, water and wildlife, and improved quality of life for vegetable growers, their families and rural communities.

Unlike the organic label, product labels that reflect sustainable practices, such as *as natural*, *pesticide-free*, and *free-range*, are currently unregulated and have no defined standards or mechanisms by which to verify compliance to a particular practice.

### **Elements of Sustainability**

- 1) **Integrated Pest Management (IPM)**: IPM is a sustainable approach to managing pests by combining biological, cultural, physical and chemical tools in a way that minimizes economic, health and environmental risks. It is a socially acceptable, environmentally responsible and an economically practical crop protection from pests. A critical factor in the effective use of chemicals for pest management is the timing of application and ensuring the correct herbicide is used for the specific variety being sprayed.
- 2) **Other Chemical Uses to Manage Production Risks**: Agricultural chemicals have continued to improve each year. An increased focus on safety for people and the environment, as well as the continual battle against induced resistance, have led to a new emphasis on narrow-spectrum material with extremely low use rates. New pest and weed control tools are continually becoming more widely used because of the Food Quality Protection Act. These new materials will require some serious dedication to integrated programs. Growers will need greater knowledge about reducing production risks and timing will be critical.

Weed control is one of the first things a vegetable grower will want to think about when establishing a field of growing vegetables. For most perennial grasses and broadleaves, fall herbicide applications (late September through early November) are more effective than spraying in the spring. Possible ways to avoid new weeds/grasses may include:

- Do not use the same herbicide or application program year after year.
- Watch for new seed/plant species.
- Do not let weeds go to seed.
- Practice weed prevention – do not allow machinery to carry weed seeds.
- When encountering a new weed never seen before, contact the County Extension Agent. This information will then be entered into the Weed Alert System.

- 3) **Pesticides:** Plant pests have the potential to cause significant economic losses in many vegetable crops. Even a slightly damaged vegetable plant will reduce market value. While biological control is important, most agricultural pests can be best controlled by monitoring and insecticide spray programs.

What spray materials a grower will be using from year to year to manage production risks is becoming more of a guessing game. No one really knows how the Food Quality Protection Act (FQPA) will shape the future of pest control, or for that matter, where resistance problems will begin to crop up each season. Rather than simply waiting, many producers are taking a proactive step by developing and utilizing a pest management strategic plan.

Local, state and national USDA agencies, along with Land Grant Universities, continue to support and work closely with agricultural groups through test-plot and other pilot programs, evaluating emerging technologies, environmental stewardship, estimation of economic consequences, and various resistance management tools, including information management and dissemination.

- 4) **Soil and Water Conservation:** Many soil conservation methods help prevent loss of soil due to wind and water erosion. Incorporating soil conservation practices within a farm operation may lower a grower's production costs. Utilizing reduced tillage within a farm plan can be considered a long-run risk management strategy because it will save soil, allowing a producer to remain ahead or at least competitive from a soil productivity standpoint.

Water conservation and protection are an important part of agricultural stewardship and risk management. Many practices have been developed to improve quality of drinking and surface water, as well as to protect wetlands. Wetlands play a key role in filtering nutrients and pesticides, in addition to providing wildlife habitat.

Proper management of nutrients, including nitrogen and other plant nutrients, can improve the soil and protect the environment. Increased use of on-farm nutrient sources, such as manure and leguminous cover crops, also reduces purchased fertilizer costs. Trees and other woody perennials are often underutilized on farms and ranches. Agro-forestry covers a range of tree uses on farms, including inter-planting trees (such as walnuts) with crops or pasture, better managing woodlots, and using trees and shrubs along streams as riparian buffer strips.

Horticulturists with questions about sustainable agriculture, may contact the following Land Grant Universities: **University of Idaho** at (208) 885-6639; **Oregon State University**, contact Extension Service's central number at (541) 737-2713; **Washington State University**, Center for Sustaining Agriculture and Natural Resources at (509) 335-2885.

## **ORGANICALLY GROWN PLANTS**

Current statistics show throughout all of agriculture, farm producers are looking more and more to the organic niche. With more acres becoming organically certified each year throughout the Pacific Northwest, vegetable/specialty crop growers are taking the

appropriate steps to transition their existing traditional farm practices to an approved organically grown crop production process.

Issues such as standardization of organic rules, methods for certifying organic products, procedures for "certifying the certifiers," and definitions of organic food and organic food production continue to be reviewed at the federal and state levels. All farm producers considering the option of organic food production should be aware of these issues and their ramifications. In 1990, as part of the Farm Bill, the Organic Foods Production Act (OFPA) of 1990 was passed which included establishing methods to certify organic products as well as methods to certify the people and organizations who would be certifying organic products. The federal law does not require states to have an organic agriculture policy. However, if a state does pass legislation pertaining to organic production, the federal requirements have to be satisfied. Idaho, Oregon and Washington states do have specific certification guidelines in place.

**Vegetable/specialty crop growers should consider the following when deciding whether or not to begin growing organically grown crops:**

1. ***What Is Organic?*** The National Organic Standards Board (NOSB 1996) defines Organic Agriculture as: an ecological production management system that promotes and enhances bio-diversity, biological cycles and soil biological activity. It is based on minimal use of off-farm inputs and on management practices that restore, maintain and enhance ecological harmony. 'Organic' is a labeling term that denotes products produced under the authority of the Organic Foods Production Act (OFPA) of 1990.

Organic farming is often described as synthetic chemical free, but as with most rules, sometimes there are exceptions. A question a specialty crop producer who is considering organic production should ask is: "Does the law expect us to convert quickly and completely to organic production?" The answer is described in the National Organic Standards Board's Final Recommendations (p.16): "In a farming operation where both organic and non-organic fields, crops, or livestock are managed, the time table and level of transition to organic production is at the discretion of the producer.... Organic certification should be determined solely on the basis of the farm's compliance with the OFPA." The interpretation is that as long as what is grown organic stays within the rules, no pressure will be given by the law to quickly convert the producer's entire operation to organic."

2. ***Where can I market/sell the organic crop(s)?*** The law dictates that organic crops need to be handled, processed, and stored in facilities separate from conventionally grown and handled crops. Markets do exist for organic products. While farm gate sales and U-picks may seem to be the obvious markets, they may not be the best choices, particularly for products that are not marketable to the public unprocessed. Niche markets do exist for organic products, but it is up to growers to find the buyer. Suggestions/steps to becoming a certified organic producer may include: 1. Locate a market for your plant production; 2. Determine if acres that you are considering for organic production have been synthetic chemical free for at least three years, and have records to prove the acres

meet this requirement; 3. Learn about the current status of organic agriculture regulations within the state where your land is located; or 4. Work with a certifying agent to complete and submit the paperwork for becoming certified.

3. **State Laws:** In the United States, thirty-two states currently have legislation that regulates the production and processing of organic food products. The rules and regulations for these laws vary from state to state. In the Pacific Northwest, Idaho, Oregon, and Washington states have set specific guidelines and laws.

4. **State Agencies:** Of the states having organic laws, only Idaho and Washington operate organic certification programs through state agencies. These certification programs are housed in the state department of agriculture, which serves as both the government regulator and organic certification agency according to the state legislative rules. State certification agencies have the ability to enforce organic rules and impose penalties and fines for violations in the production, processing and marketing of organic food products.

5. **Private Organic Certification Agencies:** Oregon is served by the Tilth Certified Organic Certification Association. This organization has its own set of organic standards and requires annual inspections of farms, processors, and handlers in order to be certified. Private certification agencies will often certify producers in states other than the one in which they are located, including states that do not have organic laws.

6. **Registration and Certification Requirements:** Idaho and Washington state laws require annual certification for organic producers, processors and handlers. In order to be certified, applicants must be inspected every year to verify they are following organic standards. Oregon law requires producers, processors, and handlers making organic claims, be registered with the state. Certification is voluntary as organic registration does not require annual inspection or application process.

## **Organic Insect and Disease Pest Management**

When insect pest outbreaks occur, organic growers have three control strategies to choose from: mechanical, biological control, and organically approved insecticide materials. All of these methods should be considered as last resorts. If little or no effort is made to create an ecologically diverse farm environment, economically damaging pest infestations will be a recurring phenomenon.

### **Insect Control Methods**

1. Bug vacuums physically remove insect pests. They are non-selective and may remove beneficial insects as well. Bug vacuums are extremely effective when used in combination with a trap crop. For example flea beetles vacuumed off an early radish trap crop reduces flea beetle populations for following brassica crops.

2. The use of floating row covers excludes flying insects. Floating row covers are affordable and available in large enough sizes to allow use on large acreage.
3. In some cases hand removal of insect pests may be the most affordable option. If done in a timely fashion, insect pest populations may be held in check.
4. Sticky traps in combination with insect attractants are sometimes effective.

### **Biological Insect Control Methods**

Biological insect control is an essential component of an organic pest control strategy. Biological control uses insect pest predators, parasites or pathogens to control insect pest infestations. Organic growers may augment beneficial insect populations present in the field, import entire populations or enhance plant diversity in the field and along field edges to provide habitat for beneficial insects.

### **Insecticide and Disease Control Materials for Organic Production**

Broad spectrum botanical insecticides affect a wide array of insects pests, while the narrow spectrum horticultural oils and dusts and insecticidal soaps are somewhat more selective and of lower toxicity. Organically approved fungicidal materials are preventive and usually applied before disease problems are manifested in the field. All of these materials are used only when the non-chemical crop husbandry practices have proven ineffective and pest damage is reaching economically damaging levels. Please contact organic certification agencies for a list of approved materials before applying any insecticide.

### **CROP INSURANCE FOR ORGANICALLY GROWN INSURABLE CROPS**

USDA has set specific guidelines to provide crop insurance for Organic Farming Practices. The Agricultural Risk Protection Act of 2000 (ARPA) provides that organic farming practices be recognized as good farming practices. Prior to this ruling, crop insurance policies may not have covered production losses when organic insect, disease, and/or weed control measures were used and such measures were not effective.

#### **Written Agreements**

The Federal Crop Insurance Corporation (FCIC) is currently revising the Basic Provisions to reflect the modifications made by ARPA. Until specific insurance program procedures are set in place and for the crop year 2002, USDA's Risk Management Agency (RMA) will recognize organic farming practices as good farming practices by providing coverage for organic producers by written agreement. Written agreements are not available for catastrophic risk, income protection, revenue assurance plans of coverage or for pilot program crops, unless permitted by the crop provision.

#### **Coverage Availability**

Coverage for organic acreage for crop year 2002 will be available for both transitional and certified organic acreage in accordance with approved underwriting guidelines and

procedures. Insurable damage caused by insects, disease or weeds will be covered if recognized organic farming practices fail to provide an effective control. Damage caused by the failure of organic farming practices to control weeds due to an insured cause of loss is also covered. If any acreage does not qualify as a certified organic acreage or transitional acreage location within the unit by the final acreage reporting date, such acreage will be insured under the provisions of the standard policy and applicable rates and coverages for the conventional practice or type in effect on the final acreage reporting date.

### **Price Election an Dollar Amount of Insurance**

The price elections or dollar amounts of insurance applicable to both certified organic acreage and transitional acreage will be the price elections or dollar amounts of insurance published by RMA for the crop for the current crop year. The insured is required to maintain separate APH databases for "conventional and transitional or certified organic acreage. Premiums will be adjusted to recognize any additional risk associated with covering organic crop acreage.

### **Crop Losses**

If a written agreement is not requested for organic farming practices, loss adjustment procedures within the applicable crop insurance policy will apply. Example given: appraisals for uninsured causes of loss will be applied when conventional farming practices would have prevented damage due to insects, disease, or weeds.

### **QUESTIONS TO CONSIDER:**

1. Which benefits will new practices provide?
2. What flexibility will I give up?
3. What are the economic tradeoffs between more aggressive pest control and minimal control?
4. Are my pest management strategies consistent with my management philosophy about environmental quality?
5. Will more intensive monitoring of pests be an economical strategy?
6. Do I have adequate access to certifiable acres for my vegetable farm crops?
7. Do I have the skills for producing vegetable crops (tomato, pepper, onion/garlic sets, etc.) without many of the nutrients and pesticides I may have become accustomed to?
8. Do I have the ability and opportunity to market the crop at a premium sufficient to compensate for the additional costs, higher losses, and the paperwork complications?

Individuals with questions about specific state organic laws may contact:

**Idaho** Department of Agriculture at (208) 332-8661;  
**Oregon** Department of Agriculture at (503) 986-4720; and  
**Washington** Department of Agriculture at (360) 902-1877.

Vegetable growers with questions about the organic certification process applicable to their area, may contact:

Idaho Department of Agriculture at (208) 332-8661 - **ID**  
Quality Assurance International at (619) 792- 3531 – **ID, OR & WA**  
Washington State Department of Agriculture at (360) 902- 1877 - **WA**

Oregon Tilth Association at (503) 378- 0690 – **OR & WA**  
Organic Crop Improvement Association at (402) 477- 2323 – **OR & WA**  
Farm Verified Organic at (701) 486- 3578 - **OR & WA**

## **Enterprise Diversification**

Diversification is an effective way of reducing income variability. It is the combining of different production processes. Effective diversification occurs when low income from one enterprise is simultaneously offset by satisfactory or high incomes from other enterprises. It typically reduces large year-to-year variations in income and may ensure adequate cash flow for meeting production costs, debt obligations, and family living needs. However, diversification may become increasingly costly, acquiring an overall knowledge of the alternative business (such as ensuring adequate liability insurance is obtained if customers will be visitors on your vegetable farm). New crop production expertise or having the necessary equipment for a new commodity may also be an expense that may not add-up within a farm business plan.

Expanding into new areas (that may utilize the equipment or land you own or rent) or will increase capital investment requirements. For instance, diversification for a vegetable grower can include opening up an on-site farm market outlet or experimenting with new commodity crops. This could also include growing a combination of different varieties of a particular crop or planting a crop in succession or progressively for multiple (or optimal) harvesting and marketing opportunities (to have plants ready for shipment, market or for sale at different times).

Through crop diversification as a production risk management tool, growers may acquire another marketing tool, essentially providing another key as a way to enhance profitability. Direct marketing of the diversified crop to consumers is becoming much more common, some may include farmers markets, u-pick/on-site farm business, roadside stands and community-supported agriculture events.

The incentives for diversifying income sources depend on the variability of returns faced by a producer. Diversification can also be achieved through different income sources, such as on-farm businesses (bed-and-breakfast businesses, guided tour and educational groups from local areas or schools, colleges, etc.); off-farm income (savings interest and dividends, employment) to help counter negative fluctuations in farm income.

### **QUESTIONS TO CONSIDER:**

1. What knowledge and management capabilities do I need for an additional enterprise?
2. Are they readily available?
3. Is this a product or service that is in demand or has a current long-lasting marketing niche?
4. Do I have a serious commitment to a new enterprise?
5. Will my current cash flow situation and future plans be able to include a diversification expansion?
6. Which additional capital investments would I need to diversify?

7. What or are there added labor needs of a new enterprise?
8. Are the new markets close in proximity for delivery?
9. What is the income relationship between a prospective new enterprise and my existing enterprise(s)?
10. Will the new enterprise provide effective diversification?

## **Capital Investments**

**1) Irrigation.** An effective irrigation system can certainly secure a crop and/or lower the risk of crop failure. However, producers must research the total investment cost for an irrigation system which may include: additional labor; land preparation; machinery; sprinkler/irrigation system; ditch/flood irrigation preparation; and possibly a year's income of crop production while the system is being installed or incorporated.

When making irrigation decisions, information is money. Vast improvements have been made with the availability of precise equipment to help specialty crop growers monitor their water outputs. Irrigation measuring devices have almost become commonplace in progressive agricultural businesses. Irrigation systems can tell vegetable growers precisely how much water is needed with some new monitoring techniques that continuously record a crop's water status.

**2) Fertigation** is the application of fertilizers through irrigation water and is more widely used throughout agriculture today than ever before. A vegetable producer's knowledge of the soil fertility throughout their fields and irrigation system itself are important factors. As for soil fertility, it may be a good concept to have a lab run tests for phosphorous and potassium in the top 12 inches, referencing a cut/fill map, then selectively fertilize the cut spots with phosphorous and perhaps potassium.

**3) Drainage** In some areas where spring water runoff or excessive rainfall occurs, drainage systems are set up and used extensively to reduce the risk of crop failure, but the costs can be substantial. Conservation diversions and terracing are also successful.

**4) Machinery** capacity in excess of what is needed in a normal year allows the work to be completed in a timely manner if there are delays due to weather, breakdown or other unforeseen events. For any capital investment, producers may compare the expected returns with the alternative uses of the capital including other risk management strategies such as a savings account. Since these investment costs are usually high, producers must also consider options that do not require a direct expenditure to reduce risk such as diversification.

### **QUESTIONS TO CONSIDER:**

1. Is my vegetable/specialty crop operation in a good financial position to make these investments for improvement?
2. Will the investment of purchasing new equipment payoff in the long-run?

## **Landlord/Tenant Relationship**

When additional land is needed for an expanding a farm business, land rental (when purchase of land is not available or viable) terms can increase risk consideration. The first step when proceeding to enter into a rental agreement is to add this strategy to your farm business management plan. If the rental or purchase cost is too high for an individual operation, vegetable producers must be willing to pass up the opportunity and select only the situation that will enhance their financial position. Also, utilizing good conservation practices to minimize soil erosion should be maintained consistently with a landowner's philosophies. Producers must also plan their operation so their labor availability, machinery capacity, management structure and land base are not only balanced, but the landlord is fully aware of how the land will be used. All this information should be included in the rental agreement.

### **QUESTIONS TO CONSIDER:**

1. What benefits will renting land provide/add to my vegetable operation?
2. What flexibility will I give up?
3. Do I understand the conditions of the contract between my farm business and the landowner?
4. Do I need legal advice?

## **Contract Production**

Contract production may provide a vegetable producer an opportunity for a potentially higher plant selling price, as well as an assured market. Contract production may also give the contractor considerable control over the production process. Through production contracts, an agricultural processor or firm commits the vegetable producer to deliver a specific quality and quantity of the commodity grown. Contractors may specify in detail the production inputs supplied by the contractor and the compensation to be paid to the commodity grower. The producer must comply with the processor's quality specifications and may elect to manage production risk with sound management practices, including working closely with Extension agents specializing in vegetable production.

Before agreeing to a production contract, growers need to consider the risk/reward tradeoffs. A major advantage for the grower is the market guarantee, and sometimes a more favorable price. A disadvantage is a vegetable producer may lose the opportunity of benefiting from upside price potential, since the sale of the product may be fixed by conditions of the contract. The loss of flexibility and profit opportunities is the cost of receiving a predictable cash flow. The challenge associated with contract production is to find contracts that are consistent with the grower's goals and risk tolerance.

### **QUESTIONS TO CONSIDER:**

1. What benefits will a production contract provide?
2. What flexibility will I give up?
3. Do I understand the conditions of the contract?
4. Do I need legal advice?

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## QUESTIONS WITH (OPTIONAL) ANSWERS TO CONSIDER

Farming today is the job of putting science into practice. Chemistry, physics and mechanical engineering are pre-requisites. And there is one more necessary element: the willingness to try new ideas. In the competitive business of farming, ideas are gold. They give an agriculture producer an edge. The following are a few question examples to consider when guiding your farm's production risks through a global economy:

***What role will you play in the production-to-market process?*** Boosting a farm's production efficiencies can be as easy as choosing the right crop variety (one that the consumer is increasingly demanding from their own local market). To remain profitable in the new millennium, growers may need to diversify their market niche opportunities. The more functions a producer fulfills in the chain and the more contact a grower has with the end market, the greater the real risk as well as the potential rewards. Some in the process include:

- GROWER of products, ingredients, components or raw materials;
- PROCESSOR of finished goods in marketable condition;
- DISTRIBUTOR to wholesalers or retailers;
- RETAILER of vegetable/specialty crop plants and products;
- DIRECT MARKETER using farmer's markets, u-pick/on-site farm business, road-side stands, mail order/Internet;
- ORGANIZER of fellow specialty crop producers for bulk marketing purposes.

These roles identify how much a vegetable grower wants or plans to participate in the marketability of the produced crop. Choices made to produce organic starter plants, or to diversify with different crops involves production risk decisions that stretch into the delivery and marketing of the production.

***Are you producing crops popular with current and emerging markets?*** Select vegetable crops for the highest margin and those that fit local growing conditions, facilities and technology, including equipment. While consumer preferences are continually shifting, an informed producer keeps up with them rather than failing to understand the demands of the U.S. consumer.

***How do you produce to gain the greatest production efficiencies and capitalize on various strengths of your vegetable business?*** This is where control of frost (planting later in the spring), irrigation (drip, flood, pivot) and fertilization (dry, through irrigation, not at all), even organic versus conventional decisions carry strong effects on the willingness to accept risk. Today, even to the buyer, how a crop product is produced has become equally important to what the variety is. Production preferences are a luxury of this high-yield era of abundance in global agriculture.

*Who do you sell to based-on greatest short-term and long-term opportunities?* For certain crops, a long-term contract for a chosen percentage of a year's production might be a good concept. This would ensure that one buyer did not have control over the farm's livelihood. Reserving a remaining percentage for more speculative cash markets may leave room for upside opportunities. Also, committing a portion to a community based agriculture partnership cooperative could balance the enterprise portfolio, essentially providing an additional marketing outlet.

Production decisions, marketing choices and staying well informed are precious things to the success of all businesses.

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## CROP INSURANCE

One of the most common strategies used to reduce income variability associated with production risk is crop insurance. The two most common types are private crop hail and Multi-Peril Crop Insurance (MPCI). A listing of crop insurance definitions and terms is provided in Exhibit 1.0.

The first decision a vegetable grower must make concerning crop insurance is whether enough financial reserves exist to cover a disastrous crop production or marketing year. If the answer is no, then crop insurance may be an important option to consider in an overall risk management plan.

Management of production risk through the purchase of crop insurance transfers risk from the farm business to the insurer in exchange for a price stated as an insurance premium. If a producer can insure some part of their expected production, that level of production may be contracted with a buyer for a greater certainty, creating a more predictable level of revenue.

Crop insurance is a risk management tool that not only protects against losses but also offers the opportunity for more consistent gains. When used with a sound marketing program, crop insurance can stabilize revenues and potentially increase average annual profits. Vegetable crop insurance provides many important benefits:

1. Ensures a reliable level of cash flow;
2. Is an honorable and sometimes recommended loan collateral tool;
3. Allows more flexibility in a producer's marketing plan;
4. Adds confidence when following those planned strategies;
5. Provides stability for long-term business plans and family security;
6. USDA shares in the premium costs, and more (MPCI).

As some of the major sources of production risks include weather, pests and crop diseases, **USDA's Risk Management Agency (RMA)** is placing a special emphasis on strengthening the safety net for vegetable growers. Together, RMA and private crop insurance companies have developed a set of insurance programs to help control crop production and price risks at a reasonable cost.

Vegetable growers should consult a private crop insurance agent to obtain specific information and details (e.g., practices, options, and appropriate deadlines) to help decide what insurance program may best fit the needs of their agricultural business. A list of crop insurance agents is available at all local USDA Service Centers throughout the U.S. or at the website address: [www.rma.usda.gov/tools/agents/](http://www.rma.usda.gov/tools/agents/). Pacific Northwest vegetable growers can also contact RMA's Spokane Regional Office at (509) 353-2147.

**Crops currently eligible for MPCCI Coverage in the Pacific Northwest**

*Refer to the attached State Crop Fact Sheets and Crop Data Tables in the Appendix at the end of this section for summaries of crops available in each STATE and COUNTY).*

<u>ALASKA STATE</u>	<u>IDAHO STATE</u>	<u>OREGON STATE</u>	<u>WASHINGTON STATE</u>
Barley, Cabbage, Nursery, Oats, Potatoes, Wheat	Apples, Barley, Canola, Corn, Dry Beans, Dry Peas, Forage Seed Pilot, Green Peas, Grapes, Nursery, Oats, Onions, Potatoes, Processing Beans, Processing Sweet Corn, Safflower, Sugar Beets and Wheat	Apples, Barley, Cabbage, Canola, Cherries, Corn, Cranberries, Dry Beans, Dry Peas, Forage, Forage Seed Pilot, Grapes, Green Peas, Nursery, Oats, Onions, Pears, Potatoes, Processing Beans, Processing Sweet Corn, Raspberry/Blackberry Pilot, Sugar Beets and Wheat	Apples, Barley, Cabbage, Canola, Cherries, Corn, Cranberries, Dry Beans, Dry Peas, Forage Seed Pilot, Green Peas, Grapes, Mint, Nursery, Oats, Onions, Pears, Potatoes, Processing Beans, Processing Sweet Corn, Raspberry / Blackberry Pilot, Sugar Beets and Wheat

- o Not all of the crops listed above are insurable in all states/counties - contact your crop insurance agent for specific details.
- o USDA/Risk Management Agency (RMA) is placing a strong emphasis toward developing new risk management tools for crops not currently covered by a crop insurance plan.

**Yield Risk Crop Insurance Coverage**

The information in this section includes specific vegetable crop insurance information to help growers learn more about various methods to lower production risks and revenue (Adjusted Gross Revenue insurance program).

**Multiple Peril Crop Insurance Protection Program**

Multiple Peril Crop Insurance (MPCI) is often used by many vegetable growers to reduce production risk. MPCI is a broad-based crop insurance program regulated by the U.S. Department of Agriculture and subsidized by the Federal Crop Insurance Corporation (FCIC).

## **Insurance Policy**

**Policy Duration:** MPCI policies are continuous contracts and remain in force until: 1) canceled in writing by either the insured or the Insurance Provider on or before the cancellation date for the effective crop year, 2) the policy is terminated by the Insurance Provider because the applicable administrative fee or any other unpaid amount (e.g., overpaid indemnity, premium) was not paid. The cancellation and termination dates are found in the applicable crop provisions.

**Policy Cancellations :** The insured or Insurance Provider may cancel a continuous policy for any crop year following the initial crop year insured by giving a signed notice to the other party on or before the cancellation date that precedes the crop year. A request made by the insured to cancel a crop/policy after the cancellation date will be effective the following crop year.

## **Causes of Loss**

The insurance provided is against damage resulting from an insurable cause of loss occurring during the insurance period, including:

- adverse weather conditions;
- fire;
- wildlife;
- earthquake;
- volcanic eruption;
- failure of irrigation water supply.

## **Actual Production History (APH - Yield Guarantee)**

The insurance yield is based on a producer's APH, which is an estimate based on the average yield on the insured unit for four to ten consecutive years. For most vegetable crops, the yield guarantee is the actual production history (APH) yield times the level of coverage, times the insured acreage, multiplied by the insured's share. The APH is used to set the guarantee, and the base period for each APH database is determined by consecutive APH CROP YEARS, not calendar years. True risk protection must be based on a farm's own production potential. Proving historical yield records is the most realistic method of estimating it and even better if a grower's yield is above average.

## **Selecting Coverage – Two Variables**

### **1. Levels of Insurance Coverage**

The insurance yield is based on a producer's Actual Production History APH, which is an estimate based on the average yield on the insured unit for four to ten consecutive years. Producers can insure a percentage of a yield and can choose from 50-75 percent (85 percent for some crops) in 5 percent increments, of the APH yield. The APH program is defined in greater detail on page 22.

**How much coverage should a producer purchase?** There are two decisions that determine the amount of protection obtained from MPCCI:

Coverage Level: the level of yield coverage chosen

Price Election: the level of price coverage chosen

The insurance yield is based on a producer's APH, which is an estimate based on the average yield on the insured unit for four to ten consecutive years. The yield guarantee per acre is equal to your APH insurance yield multiplied by the level of coverage chosen.

## Price Elections

*For what price is the crop insured?* The price per unit of measure is issued by Risk Management Agency (RMA) prior to each crop year. This price election is used to establish the insurance guarantee, premium, and to compensate the insured in the event of a production loss occurs. Producers have a choice of various percentage level Price Elections established for each crop year (55 percent to 100 percent of FCIC established or projected market price).

**Coverage options include, but are not limited to the following percentage yield and price levels:**

50/55 lowest cost... lowest coverage [Catastrophic Crop Insurance, (CAT)]

50/100 maximum percentage of premium subsidy... protection level still below most frequent loss levels

70/100 raises coverage to more frequently experienced levels of loss

75/100 maximizes protection... generally maximizes subsidy benefit

Up to 85% coverage for some crops in selected counties, including Potatoes in Idaho State approved to offer the Coverage Enhancement Option endorsement.

**Example of a producer's coverage level and price election guarantee payment options.** (Assume: Potato crop, 100 percent share, average yield of 600 cwt/acre and \$4.50/box price election):

Producer selecting 50 percent coverage and 100 percent price election:

600 cwt yield X 50% coverage = 300 cwt

\$4.50 price election X 100% price election = \$4.50

300 cwt guarantee X \$4.50 = \$1,350 per acre guarantee

Producer selecting 75 percent coverage and 60 percent price election:

600 cwt yield X 75% coverage = 450 cwt

\$4.50 price election X 60% price election = \$2.70

450 cwt guarantee X \$2.70 = \$1,215 per acre guarantee

Producer selecting 75 percent coverage and 100 percent price election:

600 cwt yield X 75% coverage = 450 cwt

\$4.50 price election X 100% price election = \$4.50

450 cwt guarantee X \$4.50 = \$2,025 per acre guarantee

**How are loss/claim/indemnity payments calculated?** If a grower's actual average yield (adjusted for quality) is equal to or greater than the yield guarantee, no indemnity is paid. If the actual yield per acre is less than the yield guarantee, the indemnity paid is equal to the yield difference times the indemnity price, times the number of acres insured, times producer share.

**Are indemnity (loss payments) taxable income?** Yes, however, they can be reported in the tax year following harvest if you normally sell half or more of your crop then. All of the insurance payment must be deferred if any of it is. The farmer must attach a statement to the tax return for the year of crop loss describing the loss and the time it occurred, the normal marketing pattern followed, the amount and date of payments received, and the name of the insurance company involved. Both crop insurance and USDA disaster payments must be reported in the same manner.

**How much does crop insurance cost?** Premium rates are based on the loss history for the county. The premium rate, as a percent of the dollar value of protection, also varies with the APH yield. A producer’s paid premium per acre is calculated as follows:

- Insurance APH yield
- X share
- X percent yield coverage election
- X price election
- X premium rate
- X subsidy factor

**Linkage Requirements.** A producer must obtain at least CAT coverage for each crop of economic significance OR sign a "waiver" of any eligibility for emergency crop loss assistance. to be eligible for benefits under the Agricultural Market Transition Act (AMTA); loans or any other USDA-provided farm credit, including guaranteed and direct farm ownership loans, operating loans, and emergency loans under the Consolidated Farm and Rural Development Act provided after October 13, 1994; and benefits under the Conservation Reserve Program provided by any new or amended application or contracts executed after October 13, 1994. Execution of a “waiver” does not affect the producer's ability to participate in any Federal crop insurance program administered under the Federal Crop Insurance Reform Act of 1994.

**Insurance Premium USDA Subsidized Payments** The Agricultural Risk Protection Act of 2000 (2000 Act) made crop insurance more affordable and useful to producers through increased subsidies for buy-up coverage and provides increased Federal backing for insurance that provides both yield and price protection.

Subsidy Levels (Amount of Premium Paid by USDA)			
Policy Coverage Levels	Current APH	Current Crop Revenue (varies by crop differential)	2000 Act New Subsidy Levels APH
50/100	55%	42%	67%
55/100	46%	35%	64%
65/100	42%	32%	59%
70/100	32%	25%	59%
75/100	24%	18%	55%

**Administrative Fees.** The 2000 Act included changes to administrative fees paid by eligible producers. For Catastrophic Risk Protection (CAT), a producer must pay \$100 for each eligible crop insurance contract in each county. The administrative fee will be billed on the date contained in the Special Provisions. For coverage at levels in excess of CAT, the administrative fee is \$30 per crop per county. Administrative fees for CAT and additional levels can be waived for Small-Limited Resource Farmers.

Administrative fees are due annually and are paid to the insurance provider. Only those persons acting in place of the producer/insured under a power of attorney, landlord/tenant agreement, or a legal guardianship, may pay the administrative fee.

### **Important Dates/Deadlines**

Even the best crop insurance plan is of little use if the right information is not collected and submitted on time. Likewise, if certain actions are not completed by the necessary date, producers may not receive full benefit from the risk protection they have selected. The following are important crop insurance dates to be noted:

**Sales Closing Dates.** To participate, a person must apply for insurance on or before the applicable sales closing date. This is the last date to apply for crop insurance coverage for any FCIC policy, or make changes in coverage from the previous year. Growers need to decide by this date the type of policy and the level of protection they want. Sales closing dates vary by crop and by state. Private hail insurance can often be purchased throughout the growing season. Sales closing dates falling on Saturdays, Sundays, or legal holidays are extended to the next business day.

**Acreage Reporting Date:** Producers must report (by type and or varietal group, if applicable) the number of acres insurable and uninsurable for which the insured grower has a share.

**Billing Date:** Although premiums are payable on the day after the sales closing date, the policy holder will not be billed until the premium billing date. Generally this date falls near harvest. Interest charges begin to accrue 30 days after this date on any premium payments not yet paid, at the rate of 1.25 percent per month. If an indemnity payment is made, any premiums still due will be deducted from these payments.

**End of Insurance Period:** Following this date, the farmer no longer has any production or revenue guarantee on the crop. This date is the earliest date the crop is harvested, abandoned, or totally destroyed, the day the final adjustment on losses is made, or a specific calendar date set in each crop policy.

**Date to File Notice of Damage:** This is the last date to report actual production or quality losses in order to receive an indemnity payment. Notice is required within 72 hours of the discovery of the damage, but not later than 15 days after the end of the insurance period. Producers shall provide notice of loss damage or probable loss to the Insurance Provider without delay to determine whether or not an inspection is necessary when the following occurs:

1. During the period before harvest, the insured crop on any unit is damaged to the extent that the insured does not expect to further care for or harvest any part of the acreage. Such acreage must be left intact until inspected.

2. The insured wishes to put insured acreage to another use. The insured must NOT put acreage to another use before the crop's potential production is appraised and written consent is given for such other use.

3. An indemnity or replanting payment is to be claimed on any unit.

**Policy Termination Date:** If premiums are not paid by this date, the insurance coverage for the following crop year will be terminated.

**Cancellation Date:** This is the last date to give written notice to the insurance company if the grower does not wish to carry crop insurance the next year. Otherwise the policy will renew automatically for another year.

**Production Reporting Date:** This is the date to submit the most recent crop production records from which to recalculate the Actual Production History (APH) yield. The production reporting date is usually 45 days after the policy cancellation date. If the acreage reporting date (for the following year) is earlier than this, then that is the last production reporting date.

Producers should make a list of the important dates (which follow) that apply to their insured crops and mark them on a calendar. This will allow producers to enjoy the full level of risk protection they have purchased.

Program Dates (ID, OR, WA) {Generally for MPCl, unless otherwise noted. Dates falling on a weekend/holiday move/apply	Final Sales Closing Date	Final Production Reporting Date	Final Acreage Reporting Date
By Crop (Alphabetically)			
Adjusted Gross Revenue	01/31	n/a	n/a
Cabbage (Pilot Program - Oregon & Washington)	02/01	03/19	Varies by type***
Cabbage (Alaska)	03/15	04/30	07/02
Corn	03/15	04/30	07/02
Dry Beans	03/15	04/30	07/02
Dry Peas	03/15	04/30	07/02
Green Peas	03/15	04/30	07/02
Mint with Winter Coverage	10/02	11/14	12/15
Mint without Winter Coverage	03/15 ****	04/30 ****	07/02
Onions (Fall Types)	08/31	10/16	12/15
Onions (Spring Types)	02/01	03/19**	07/02
Potatoes	03/15	04/30	07/02
Processing Beans	03/15	04/30	Varies by County
Sugar Beets	03/15	04/30	07/02
Sweet Corn	03/15	04/30	07/02
***Fall planted - 4/30; Spring planted - 6/20; Summer planted - 8/10 **** First year of coverage only			

## Actual Production History (APH - Yield Guarantee)

For most vegetable crops, the yield guarantee is the actual production history (APH) yield times the level of coverage, times the insured acreage, multiplied by the insured's share. The APH is used to set the guarantee, and the base period for each APH database is determined by consecutive APH CROP YEARS, not calendar years. True risk protection must be based on a farm's own production potential. Proving historical yield records is the most realistic method of estimating it.

The APH yield is determined from a producer's certification of production records for a minimum of four, and up to ten consecutive crop years for each insurance unit. Information used to prove crop yields can include sale receipts, farm or commercial storage/packer records or pick records. Records must be for continuous years, starting with the most recent year and continuing back in time. Once a missing year is reached, no history prior to that date may be used. For example, if a producer has nine years of production records spanning a ten-year period, only the years after the missing one are counted. Dropping a yield from one year because of poor production is not allowed. An exception is made if the crop being insured was not planted in a certain year. In that case a zero acreage report is submitted and continuous records are maintained even without data for that year.

***The first step in developing a crop risk management program for a farm is to establish the proven yield and unit structure. The (APH) is used to set the guarantees for vegetable crop FCIC-backed insurance plans.***

## **Transition Yields**

Yield levels for most FCIC crop insurance coverage is based upon APH **or** a percentage of an established county yield or a combination of both. APH will require a minimum of four years of production records and will accumulate to a maximum of ten years (five years for apples) of production records. For farmers who have less than four years of production records, variable Transitional "T" Yields are used to complete the four-year database. However, the approved APH yield for producers who elect not to supply records is limited to 65 percent of the applicable "T" Yield for the first year the producer is insured. T-yields may be established by tree age and densities.

If only a few years of yield records exist, the APH yield may be considerably below the actual expected yield because of the reduced T yields. A new farmer or one who has never planted or produced the crop to be insured will receive 100 percent of the T yield for the APH. If he/she continues to produce the perennial crop, the T yields will be replaced with the actual production each year. New producers who have previously been closely associated with farming a particular unit, such as children taking over a family farm, can use the previous operator's records to establish an APH yield. See your crop insurance agent for specific details.

Once four years or more of production history are available, the APH is the simple average of all the yearly reported yields. The four years of history will eventually build to ten years (five years for apples). After ten years of history are reached, the APH becomes a moving ten-year average yield. As each new year of production history is added the oldest record is dropped out of the calculation.

T Yield reduction factors are 65% of the County T Yield with no years of production records certified; 80% of County T Yield with one year of records; 90% of County T Yield with two years of records; and 100% of County T Yield with three years of records certified. The following example assumes a County T Yield of 520 hundred weight per acre for potatoes.

Years of Actual Production Records	Factors	County T Yield Cwt/Acre	Adjusted APH Yield Cwt/Acre Coverage
0	.65	520	338
1	.80	520	One Actual, Plus Three Years of T-Yields at 416 cwt Each
2	.90	520	Two Actual, Plus Two Years of T-Yields at 468 cwt Each
3	1.00	520	Three Actual, Plus One Year T-Yield at 520 cwt
4	No Factor	—	—

**Example of the Benefits of Providing Production Evidence/Proving Actual Yields**

YEAR	YIELD	ACTUAL YIELD
97	No records	680 cwt/a
98	520 cwt T Yield	635 cwt/a
99	520 cwt T Yield	650 cwt/a
00	520 cwt T Yield	570 cwt/a
01	610 cwt Actual Yield	610 cwt/a
2170 Total cwt Divided by 4 years = 542 cwt/ac.		3145 Total cwt Divided by 5 years = 629 cwt/ac

*87 cwt/acre difference*

Although the APH is usually just a simple average of production history for each insurance unit, a grower who enters farming, adds new land, plants a new crop, produces a bumper crop or has a crop failure can cause one or more of the special provisions to be implemented. That is why it is a good idea to establish the APH for each insurance unit with a licensed crop insurance agent long before the sign-up date. Even for the CAT level of coverage, an APH value for each farm unit is needed.

**ACREAGE AND PRODUCTION EVIDENCE REQUIREMENTS (APH)**

Certifying production history is an important, and sometimes critical, facet of an insurance policy. Certified production provides flexibility to the insurance policy, essentially making the policy better tailored to meet the needs of the farm business’s risk management plan, and may maximize any FCIC crop insurance coverage.

Production to count is all harvested and appraised production for the unit. Appraised production includes, but is not limited to, production lost to uninsured causes, and mature unharvested production (may be adjusted for quality deficiencies and excess moisture). Keeping records, verifying production, and providing actual production history can raise guaranteed yield levels used in coverage calculations.

The following example illustrates how important APH records are. Assume coverage for potatoes is 629 cwt average/proven yield; 520 cwt County T yield; 75 Percent Coverage Level and a \$4.50 Expected Market Price.

<b><u>NO Production Records Provided:</u></b>	<b><u>65% of the T Yield of 520 cwt = 338 cwt</u></b> <b><u>75% Coverage Level X 338 cwt = 254 cwt</u></b> <b><u>254 cwt X \$4.50 = \$1,143.00/acre Guarantee</u></b>
<b><u>Production Records Provided:</u></b>	<b><u>75% Coverage Level X 629 cwt Proven Yield = 472 cwt</u></b> <b><u>472 cwt X \$4.50 = \$2,124/acre Guarantee</u></b>

**Acceptable Production Reports and Supporting Evidence**

Acceptable records are required which support the approved APH yield. If selected for field review, supporting evidence is required to be available by the insured for all the crop years for which acreage and production was certified on the current crop year APH form (by crop). Acreage and production evidence must be retained by the insured for three crop years after the end of the crop year for which it is initially certified. The following acreage and production evidence requirements pertain to some vegetable crops using the APH form as production reports. **APH Provisions by Vegetable Crop.** The following provides information regarding acceptable supporting documentation for APH certifications.

**Beans - Processing.** A copy of the contract is required. Processor records must be settlement sheets showing tons delivered for payment (gross tons if there was no quality adjustment), grade, where specified on the actuarial table, and harvested acres. If farm management records are used to support production reports, they must be substantiated by records from a marketing outlet, processor, packer, or first handler.

**Corn.** Settlement sheets, ledger sheets and assembly sheets must show gross production in pounds or bushels except for silage that must be in pounds or tons to tenths. Individual scale tickets may be used to support determinations for moisture, dockage, kernel damage, test weight, quality adjustment and unit division. To be eligible for quality adjustment, specific determinations must be made by a grain grader licensed by the Federal Grain Inspection Service or licensed under the United States Warehouse Act.

**Dry Beans.** Contract Seed Beans: The unit of measure is whole pounds of clean seed equivalent as derived from dollars per acre. A copy of the seed company contract must be on file to show the contract price for each variety grown for the current crop year. Acceptable supporting records are final settlement sheets specifying pounds of merchantable clean seed, any cull or mill tare poundage and the price paid or value of the respective production.

**Dry Peas.** Acceptable supporting records: Smooth Green and Yellow. Settlement sheets must show gross production, dockage and net production which grades #1 or better (or adjusted to #1 in accordance with policy provisions). Dockage is determined by loss adjustment methods currently in effect. Lentils. Settlement sheets must show gross production, dockage and net production which grades #1 or better (or adjusted to #1 in accordance with policy provisions). Dockage is determined by loss adjustment methods currently in effect. Contract Seed Peas. The unit of measure is whole pounds of clean seed equivalent as derived from dollars per acre. A copy of the seed company contract must be on file to show the contract price for each variety grown for the current crop year. Production to count for yield determination will be final settlement sheets specifying pounds of merchantable clean seed, any cull or mill tare poundage and the price paid or value of the respective production.

**Onions.** Adjustments to Prior Years' Production. Prior years' total production reported as field-run must be adjusted to reflect applicable grade standards. **Acceptable Supporting Records** include: 1) For production that is sold or delivered at time of harvest, settlement sheets must indicate gross weight (onion production minus dirt and foreign material) AND net sorted weight or graded eight with percent of pack based on applicable grade standards. 2) Farm stored production, should be graded or production adjusted for APH purposes (using applicable grade factor) according to applicable grade standards prior to being placed in the storage structure, gross weight (onion production minus dirt and foreign material) or structure measurements indicating deductions for obstructions are acceptable. 3) Measurements must be verifiable and definitive for sold, delivered, and farm stored records.

**Green Peas.** Acceptable Supporting Records. A copy of the contract and/or settlement sheet must show planted acres, the contract price for the tenderometer reading, sieve size, or grade factor shown on the Special Provisions of Insurance for that type of pea, dollars received for peas delivered (exclusive of bonuses for acres, high production, split payment, late planting payment, etc., or deductions for seed, pesticides and their application, planting or harvesting), variety (specific name from the seed company) and acres harvested. Bypassed/Unharvested Acreage.

**Processing Beans** For harvested delivered production, determine the production for APH by dividing the dollar amount received from the processor by the contract price per pound for the tenderometer or sieve size designated by the actuarial table. All dry pea production harvested from green pea acreage, provided the insured retains ownership of the dry peas, will be multiplied by 1.667 for shell types, 3.000 for pod types, and added to

the total green pea production on the APH form. For processing beans, the total production is divided by the acreage originally planted to green peas.

**Potatoes.** If farm management records are used to support production reports, they must be substantiated by records from a marketing outlet, processor, packer, or first handler.

**Northern Potato Crop Provisions .** Production that is sold or delivered at the time of harvest must include potatoes sold as seed, fresh market or processing potatoes, and account for culled potatoes. Refer to note below for further clarifications on adjustments of production that may also be applicable. Acceptable supporting records for: 1) Processed potatoes settlement sheets must show first net weight. 2) Fresh market and table stock potatoes settlement sheets must show total pack-out weight (including overweight, over-pack, etc., if applicable), including culls. 3) Farm stored production must show the gross weight of stored potatoes if an inspection is not made prior to potatoes being placed in storage. A copy of the weight slips and production measurements must be provided.

**Northern Certified Seed Potato Endorsement.** To qualify for this endorsement, the three most recent years of certified seed potato acreage and production must be furnished to the Insurance Provider. The production guarantee for acreage covered under the endorsement is the same production guarantee applicable to the acreage insured under the basic Northern Potato policy. However, the amount of acreage insured the current crop year cannot be greater than 125% of the average number of acres entered into and passing certification in the potato certified seed program in the three previous calendar years unless authorized by a written agreement.

**Northern Certified Seed Endorsement** shall include the most recent three years of certified seed potato acreage and production must be furnished to the Insurance Provider. These records must indicate the number of acres entered into and acres accepted by the potato seed certification program administered by the state in which the seed is grown.

**Northern Potato Quality Endorsement and Northern Potato Processing Quality Endorsement.** If insured under either endorsement, marketing records or records determined at the time of harvest prior to potatoes being placed in storage **MUST** indicate the percentage of potatoes grading U.S. No. 2 or better (or as otherwise specified in the actuarial documents).

**Sugar Beets:** Acceptable Supporting Records. Sugar company delivery records or settlement sheets must show net paid tons of beets delivered and percent of sugar. Adjustments to Production. Sugar beet production for APH is adjusted by taking net paid tons times percent sugar divided by county percent sugar factor found in the Special Provisions. The APH certification process is also used for Sugar Beets (verifiers are not authorized to use additional years' history which may be available from the processor).

**Sweet Corn (Processing):** Acceptable Supporting Records: a copy of the contract showing planted acres and the contract price. Processor records must be settlement sheets showing tons delivered for payment (gross tons if there was no quality adjustment), grades (where specified on the actuarial table) and harvested acres.

## **UNIT DIVISION**

Each parcel of land insured independently of other parcels is called a 'unit' and is defined as the acreage of the insured crop in the county that is taken into consideration when determining the guarantee, premium, and amount of any indemnity (loss payment) for that acreage. Unit structure is a very important aspect of maximizing the risk management protection offered by various FCIC insurance policies. One farming operation may have several insurance units. It is possible to be hailed out on one unit and receive an indemnity payment, while other units on the same farm produce a record crop. As a result, many farmers like to divide their land into as many units as possible. Of course, this may result in higher premiums on each one.

Producers can designate a basic unit for all tracts of land they own or cash rent within a county. They also receive one basic unit for all of the land they share rent with a different landlord. For example, if a crop is planted on land rented under a crop share lease with Mr. A, a crop share lease with Mr. B and a cash rent lease with Mr. C and the rest of the crop land is owned, the entire acreage would qualify for three basic units. There would be one basic unit with each crop share-owner, and one basic unit for the cash rented and owned land combined. Each crop share landowner can also insure his/her own interest in the crop as a separate unit.

Each different crop can also create a separate unit, and tracts of land in different counties must be insured as separate units. Each crop can have a different type of policy and level of coverage, and could receive an indemnity payment independent of the other units. Separate production records must be kept for each basic unit. Insuring all acres as basic units entitles producers to a ten-percent discount on their premiums. Following are two types of unit structure available for the various crop insurance options:

**Basic Unit:** The basic insurance unit is all insurable acreage of the insured crop in the county on the date coverage begins for the crop year in which the producer has a 100 percent share or which is owned by one entity and operated by another specific entity on a share basis. Basic units may be further divided into optional units.

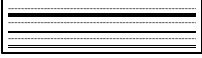
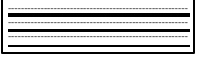
**Optional Unit:** Optional insurance units are determined by section, section equivalents, FSA Farm Serial Number, noncontiguous land (for certain perennial crops) and irrigated and non-irrigated practices. When the policy allows, optional units may be established, provided the crop is planted in a manner that results in a clear and discernible break in the planting pattern at the boundaries of each optional unit. Producers must keep separate identifiable records of planted acreage and harvested production for each optional unit.

If the same four farms described above were all owned or rented under a cash lease, they would qualify for only one basic unit for each crop. However, if the four farms were located in four legally identifiable township sections, the operator could elect to insure them as four separate optional units. Separate APH records must be reported for each optional unit, and the operator would not receive the ten percent premium discount.

Optional units may also be designated when a crop is being grown under distinctly different farming practices. For example, a grower with both irrigated and dryland acres of the same crop may qualify for optional units. However, there must be an obvious break between the irrigated and dryland acres. Other special farming types or practices may also qualify acres to be insured as separate units. Each crop policy provides specific in relation to unit structure. The following are four examples of different unit structure scenarios:

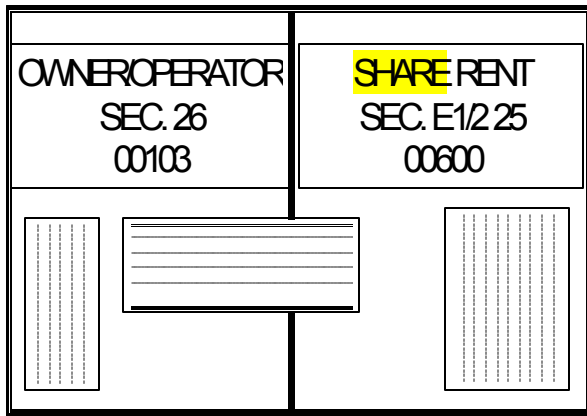
**EXAMPLE 1**

Two Sections / One Crop with Records  
Separate Units by Section

OWNER/OPERATOR SEC. 35 00101	CASH RENT SEC. 36 00102
	

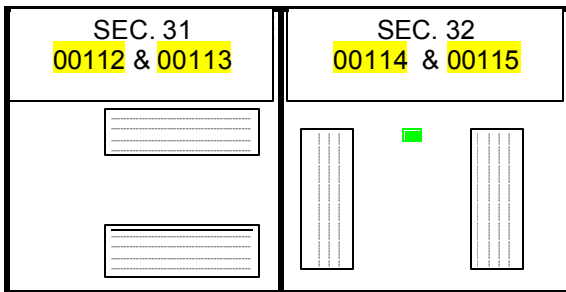
Land that would otherwise be one basic unit, may be divided into optional units when the acreage of the insured crop is located in separate legally identifiable sections(s). Therefore in this example the producer can have two optional units.

**EXAMPLE 2**  
**Continuous Planting Pattern**



Acres on which the planting pattern continues into the adjacent section, section equivalent, or FSN cannot be divided into separate units. However, less than 100 percent share, each party receives a share of the crop or proceeds, allowing it to be a separate basic unit. Therefore, in this example we have two basic units by ownership.

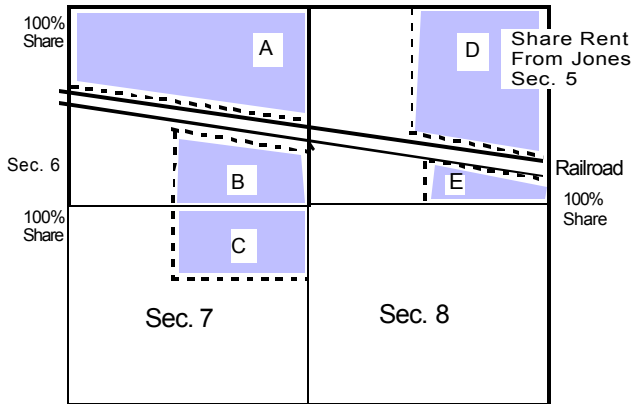
**EXAMPLE 3**  
**Non-Contiguous**



‘Contiguous land’ means separate tracts of land owned and/or operated by the insured, whose boundaries touch at any point. For certain crops, optional units are available for contiguous land. Land under separate ownership must lie in-between in order for farms to be considered as non-contiguous, and thus be eligible to be divided into separate optional units. 4 optional units

#### **EXAMPLE 4**

#### **Same Operator - All Irrigated – All One Crop**



Land separated by public or private right-of-way will be considered contiguous. Farm roads, section, section lines, streams, railroads or major highways do not make farms non-contiguous. Therefore, in example 4, there are two basic units, AND if the producer wishes, one additional optional unit (Field E).

#### **Contract Changes**

MPCI is a continuous policy and will remain in effect for each crop following the acceptance of the original application. Producers may cancel the policy, a crop, a county, or a specific crop in a specific county, after the first effective crop year, by providing written notice to the insurance provider on or before the cancellation date shown in the applicable crop provisions. Producers must request policy changes from their insurance provider on or before the sales closing date for a change of price election or coverage level. Contract changes involving a successor in interest application and corrections of a producer's name, address, identification number, administrator, etc., may be made at any time. Contract change date for nursery producers is June 30.

#### **Reporting of Crop Acreage**

Each crop year the producer is required to submit an acreage report for each insured crop. The acreage report must be signed and submitted by the producer on or before the acreage reporting date contained in the Special Provisions for the county for the insured crop. Each crop insurance policy provides specific details relating to acreage reporting.

#### **Endorsements And Options**

Some crop policies have endorsements and/or options that add supplemental coverage, exclude coverage, or otherwise modify the coverage. Generally, an endorsement or option must be applied for by the crop's sales closing date. NO options or endorsements may be attached to a CAT policy except for the CAT Endorsement.

## Catastrophic (CAT) Crop Insurance

Catastrophic (CAT) insurance is the minimum level of multi-peril crop insurance coverage at 50 percent of a producer's yield and 55 percent of the price, and meets requirements (without a waiver) for a person to qualify for certain other USDA program benefits. Farmers with limited resources may be eligible for a waiver of the fee for CAT coverage. Any crop insurance agent can assist producers in determining if they are eligible for a fee waiver.

The Catastrophic Risk Protection Endorsement is a mandatory endorsement that is available to each crop policy and modifies its terms and conditions for Catastrophic Risk Protection purposes. For CAT policies, the endorsement: 1) Limits the coverage level and price election. 2) Restricts or changes the unit structure to basic units ONLY by share. 3) Removes replant payment and prevented planting provisions. 4) Does not allow the exclusion of hail and fire coverage, or other coverage options. 5) Removes the availability of written agreements.

The CAT payment rate is 55 percent of the Market Price when the yield falls below 50 percent of the guarantee. There is no replant or prevented planting clause included in CAT coverage. Only basic units apply under CAT coverage. The following is an example of CAT coverage comparison for potatoes.

Written Agreements are not available on CAT policies.

<b>CAT POTATO COVERAGE COMPARISON</b>								
<b>Insurance Coverage Level</b>	<b>APH Yields (Cwt/Acre)</b>							
	<b>640</b>		<b>600</b>		<b>560</b>		<b>520</b>	
	– Insurance Coverage Guarantees Per Acre – Using a \$4.50 Per Cwt Established Price for Potatoes							
(% Coverage/Price level) <b>50 / 55</b>	<u>Cwt</u> <b>320</b>	<u>\$</u> <b>\$792</b>	<u>Cwt</u> <b>300</b>	<u>\$</u> <b>\$743</b>	<u>Cwt</u> <b>280</b>	<u>\$</u> <b>\$693</b>	<u>Cwt</u> <b>260</b>	<u>\$</u> <b>\$644</b>

**Northern Potato Policy.** An insured with a MPCCI Northern Crop policy in effect may elect to obtain additional coverage on potatoes through the use of endorsements (available where premium rates for the endorsements are established). The endorsements are continuous and must be elected on the application (new insureds) or contract change form (carryover insureds) and submitted on or before the sales closing date for the initial crop year for which the insured wants the endorsements to be effective. The continuous endorsement(s) may be canceled in accordance with the cancellation provisions of the policy. Beginning with the 1998 crop year, quality adjustment for production damaged by freeze and causes that result in tuber rot have been incorporated into the Northern Potato Crop Provisions.

**Northern Potato Quality Endorsement** is designed for potato insureds wanting protection against loss of quality. Protection for quality is based on the insured's marketing records on potatoes graded in accordance with the U.S. standards for grades of potatoes. If four or less years of records indicating grade are available, the grade from actual records will be averaged with the default percentage shown in the Actuarial Documents. The actuarial table may provide separate rates and coverage for U.S. No. 1 and for U.S. No. 2 Potatoes. Insureds may elect U.S. No. 1 or 2 by potato type or group, if separate types or groups are specified on the Special Provisions. The endorsement provides additional quality adjustment for production with internal defects in excess of grade tolerance and cannot be sorted from undamaged production. Acreage grown for the production of seed is not covered under this endorsement.

**Northern Processing Potato Quality Endorsement** attaches to and amends the Quality Endorsement. The Processing Potato Quality Endorsement provides coverage for low specific gravity and dark fry color and provides quality protection for all the insured's acreage that is grown under a processor's contract.

**Northern Certified Seed Potato Endorsement** is designed for Northern potato insureds who desire coverage for their certified seed production. 1. The determination of certified seed must be made by a certified seed inspector. 2. Liability under the endorsement is determined by multiplying the production guarantee of the Potato policy by the price for certified Seed Potatoes shown in the actuarial documents. 3. Availability of this endorsement is limited to counties with certified seed potato rates published in the actuarial documents, and to insureds furnishing acceptable records of certified seed Potato acreage and production for at least the previous three years. 4. Insured acreage is the acreage entered into the state seed Potato certification program. This acreage cannot be greater than 125% of the average number of acres entered into and passing the state certification program in the three previous years. If the acreage is greater than 125%, the production guarantee will be reduced in accordance with the endorsement. A written agreement may allow more acreage to be insured without the reduction in the production guarantee.

**Northern Potato Storage Coverage Endorsement** is designed for Northern potato insureds who desire coverage for damage that occurs within the insurance period, but that does not become evident until a later time. The extended coverage is applicable only if damage results in: 1) Tuber rot; 2) Certain internal defects (applicable only if the producer elected coverage under the Northern Potato Crop Insurance Quality Endorsement); or 3) Low specific gravity or dark fry color (applicable only if the producer elected coverage under the Northern Potato Crop Insurance Processing Quality Endorsement). All production must be insured under this endorsement except that grown under a contract that requires delivery to a buyer within three days of harvest.

**Coverage Enhancement Option (CEO) (IDAHO-POTATOES):** The CEO is an MPCPI-based PILOT program developed to enhance current risk management products and attaches to a crop's MPCPI policy provisions. In the event of an insurable loss under the MPCPI provisions, CEO retroactively reduces the deductible, thereby increasing the amount of coverage. This results in a larger pay out for each hundredweight (cwt.), shortfall indemnified under the MPCPI policy at the same coverage level.

The primary benefit of the CEO program is how it increases the total amount of coverage while using the same premium rate that applies to the underlying coverage. It provides a big jump in coverage for a small bump in premium.

An indemnity is never due until the MPCPI coverage level deductible is met. Assume: 65% MPCPI coverage level, 85% CEO coverage level, the insured would have to sustain damage on the crop in excess of 35% (MPCPI coverage level deductible) before an indemnity would be paid.

Producers must: 1) have an MPCPI additional coverage policy in force, with a price election of 100 percent for the insured crop; 2) elect CEO in writing on or before the sales closing date for the crop insured; 3) choose an option coverage level percentage that is at least 5 percentage points higher than the MPCPI coverage level in force.

Coverage is provided on a county basis, the same as the underlying MPCPI policy. However, some application forms allow multiple counties to be insured on one form. For crop year 2002, CEO is available for potatoes in Idaho State.

**CEO POTATOE EXAMPLE:** *Assume as an example* you are insured at 50% coverage level with a **100% price election** (\$4.50 per cwt–2000 Crop Year Price Election), an Actual Production History (APH) of 400 cwt per acre and you have a 100% share on 1 acre. Your MPCPI Dollar Amount of Insurance would be \$900. Also assume your actual yield this year was only 80 cwt./acre harvested, 120 cwt less than your insurance guarantee. At \$4.50 per cwt, your MPCPI indemnity payment would be \$540. --- \$540 divided by \$900 MPCPI dollar amount of insurance = .6000 MPCPI factor. Now assume you add CEO coverage level of 85%. The option coverage factor is 85% CEO coverage level divided by 50% MPCPI coverage level, minus 1 is 70%. \$900 X 70% = \$630 CEO dollar of insurance. .6000 MPCPI factor X \$630 = \$378. **Total MPCPI & CEO indemnity \$540 + \$378 = \$918.**

## ADJUSTED GROSS REVENUE (AGR)

The Adjusted Gross Revenue (AGR) insurance plan is a non-traditional, whole farm risk management tool. The AGR concept uses a producer's historic Schedule F tax form or equivalent, information as a base to provide a level of guaranteed revenue for the insurance period. AGR:

- provides an insurance safety net for multiple agricultural commodities in one insurance product;
- establishes a common denominator for commodity production using cash receipts;
- makes simple and straightforward use of income tax forms; and
- reinforces program creditability by using Internal Revenue Service (IRS) tax forms and regulations.

The AGR product provides the producer with protection against low farm revenue due to natural disaster or market fluctuation. Covered farm revenue is income from agricultural commodities reported on the Schedule F tax form, including incidental amounts of income from animals and animal products and aquaculture reared in a controlled environment. Incidental livestock income represents the crop production value fed to livestock. AD hoc disaster payments are not considered income for indemnity purposes.

Eligible producers may choose one of three AGR coverage levels:

Coverage Level	Payment Rate	# of Commodities
65 Percent	75 or 90 Percent	1 <sup>1</sup> (2)
75 Percent	75 or 90 Percent	2
80 Percent	75 or 90 Percent	4

The basic coverage is 65/75 and is available to all producers. To qualify for 65/90 or 75/75 or 90 percent coverage, a producer must produce at least two different agricultural commodities or four different agricultural commodities for 80/75 or 90 percent coverage and each commodity must meet a minimum revenue amount.

AGR protection liability is calculated by multiplying the approved gross revenue times the percent coverage level and payment rate selected by the producer. The approved gross revenue is the smaller of:

- the average of the producers prior five years of Schedule F tax information filed with the Internal Revenue Service. The average gross revenue may be adjusted for expanding operations; or
- expected revenue for the insurance year.

Producer eligibility includes:

- Produces agricultural commodities primarily in pilot counties, and may include income from contiguous non-pilot counties;
- Five years U.S. Income tax forms (Schedule F or equivalent) for the same tax entity for history purposes and the insurance year;
- U.S. Citizen or Resident;
- If more than 50 percent of expected income is from insurable crops animals and animal products, Multi-Peril Crop Insurance must be obtained if available;

Producer eligibility includes (cont.):

- No more than 35 percent of expected allowable income can be from animals and animal products;
- Other restrictions may apply.

## **AGR TIME-LINE**

**Sales Closing Date:** For producers in the approved piloted areas is one sales closing date of January 31 (cancellation and termination date also).

**Beginning of Insurance:** For all year filings, January 1 (For the year of application, the beginning of insurance is the later of January 1 or ten days after a properly completed application is received.)

**Contract Change Date:** November 30

**Insurance Year:** Calendar or Fiscal Year (*corresponding with a producer's IRS tax year*)

**Claims:** Claims are settled when taxes are filed for the insurance year and other MPCCI claims covering insured crops are finalized.

## **Pacific Northwest**

### **AGR Availability**

**Crop Year 2002:** Idaho State – Canyon, Payette and Washington counties  
Oregon State – Benton, Clackamas, Columbia, Lane, Linn, Malheur, Marion, Multnomah, Polk, Washington and Yamhill counties  
Washington State - Adams, Benton, Chelan, Douglas, Franklin, Grant, Kittitas, Klickitat, Okanogan, Walla Walla and Yakima

## **AGR Loss Payment**

Loss payments are triggered when the adjusted gross income for the insured year is less than the loss inception point. The loss inception point is calculated by multiplying the approved gross revenue by the chosen percent coverage level (65, 75 or 80). Once a loss is triggered, the insured is paid based on the payment rate selected (75 or 90). The loss payment (if approved AGR equals \$100,000) for this example would trigger when the income for the insurance year is below \$80,000 (\$100,000 X 80 percent coverage level).

**Assume AGR Income:**

Year	Dollar Amt.
1995	\$91,500
1996	\$119,000
1997	\$89,000
1998	\$90,000
1999	\$85,000
Total	\$474,500
<b>Average / Approved AGR</b>	<b>\$94,900</b>

**Assuming** an approved AGR of **\$94,900** and the insured's revenue to count is **\$21,000** for the insurance year, at the 80 percent coverage level, the insured's indemnity is calculated as follows:

Approved AGR **\$94,900** times 80 percent equals **\$75,920**. **\$75,920** minus **\$21,000** revenue to count equals **\$54,920**. **\$54,920** times 90 percent payment rate equals **\$49,428 indemnity due** the insured. (*Note: If the insured's allowable expenses fall below 70 percent of the approved expenses [\$44,436 in the example], the approved AGR will be reduced.*) In comparison, if **75 percent payment rate was selected**, the indemnity due would be \$41,190.

When producers purchase both AGR and other crop insurance plans, the AGR premium will be reduced. **Exhibit 5.0** provides some excellent resource examples on an **Adjusted Gross Revenue Insurance Analysis** specifically for vegetable growers.

**NON-INSURED CROP ASSISTANCE PROGRAM (NAP)**

(For the 2001 and Subsequent Crop Years How to Participate)

The Noninsured Crop Disaster Assistance Program (NAP) provides financial assistance to eligible producers affected by natural disasters. This federally funded program covers noninsurable crop losses and planting prevented by disasters.

**Who is an Eligible Producer?** An eligible producer is a landowner, tenant, or sharecropper who shares in the risk of producing an eligible crop.

**What is an Eligible Crop?** Eligible crops include commercial crops and other agricultural commodities produced for food (including livestock feed) or fiber for which the catastrophic level of crop insurance is unavailable. Also eligible for NAP coverage are controlled-environment crops (mushroom and floriculture), specialty crops (honey and maple sap), and value loss crops (aquaculture, Christmas trees, ginseng, ornamental nursery, and turfgrass sod).

***What is an Eligible Natural Disaster?*** The natural disaster must occur before or during harvest and must directly affect the eligible crop. An eligible natural disaster is any of the following:

- Damaging weather, such as drought, excessive moisture, or hurricane;
- An adverse natural occurrence, such as earthquake or flood; or
- A condition related to damaging weather or adverse natural occurrence, such as excessive heat or insect infestation.

***How Do I Apply for Coverage?*** To apply for coverage you must file Form CCC-471, Application for Coverage, and pay the applicable service fees at your local FSA office. The application and service fees must be filed by the application closing date as established by your FSA state committee.

***How Much is the Service Fee?*** The service fee is equal to \$100 per crop per county, or \$300 per producer per county, not to exceed a total of \$900 per producer for all counties.

***Are Limited Resource Farmers Required to Pay Service Fees?*** No. Limited resource producers may request a waiver of service fees. A limited resource producer has:

- an annual gross income not exceeding \$20,000 from all sources (including
- income from a spouse or other household members) for each of the 2 prior years; or
- less than 25 cropland acres for all crops, where a majority of the producer's
- annual gross income is derived from farming and this income from all
- farming operations does not exceed \$20,000.
- 

***What is the Coverage Period for NAP?*** The coverage period for NAP may vary depending on whether you grow annual, perennial, or value loss crops. The coverage period for annual crops begins the later of: 30 days after you apply for coverage and pay the applicable service fees; or the date your crop is planted, not to exceed the final planting date; and ends the earlier of the:

- date you complete the crop harvest;
- normal harvest date for the crop;
- date the crop is abandoned; or
- date you destroy the entire crop acreage.

The coverage period for perennial crops always begins 30 calendar days after the application closing date and ends the earlier of:

- 10 months from the application closing date;
- the date you complete the crop harvest;
- the normal harvest date for the crop;
- the date the crop is abandoned; or
- the date when you destroy the entire crop acreage.

The local Farm Service Agency (FSA) office can provide more detailed information on the coverage periods for perennial forage crops, controlled-environment crops, specialty crops, and value loss crops.

***What Crop Information Must be Reported to Remain Eligible for NAP?*** To remain eligible for NAP assistance, you must annually report the following crop acreage information:

- Name of the crop (lettuce, clover, etc.);
- Type and variety (head lettuce, red clover, etc.);
- Location and acreage of the crop (field, sub-field, etc.);
- Your share of the crop and the names of other producers with an interest in the crop;
- Type of practice used to grow the crop (irrigated or non-irrigated);
- Date the crop was planted in each field; and
- Intended use of the commodity (fresh, processed, etc.).

It benefits you to report crop acreage shortly after planting (early in the risk period). It relieves you of the burden of last minute maneuvering to meet reporting deadlines and possible loss of coverage. In addition, you must annually provide the following production information:

- the quantity of all harvested production of the crop in which you have an interest during the crop year;
- the disposition of the harvested crop, such as whether it is marketable, unmarketable, salvaged, or used differently than intended; and
- verifiable or reliable crop production records (when required).

You must provide your production information in a manner that can be easily understood by your FSA county committee. Questions regarding acceptable production records should be directed to your local FSA office. Failure to report acreage and production information may result in reduced or zero NAP assistance. Be aware that acreage reporting and final planting dates vary across the United States. Contact your local FSA office for your local dates. For aquaculture, floriculture, and ornamental nursery operations, you must maintain operational records. Unique reporting requirements apply to beekeepers and producers of Christmas trees, turfgrass sod, maple sap, mushrooms, ginseng, and commercial seed or forage crops. Please contact your local FSA office for these requirements.

***How Does FSA Use My Reported Acreage and Production?*** FSA uses your acreage report to verify that your crop exists and your number of acres. Also, your acreage report in combination with your production report are used to calculate your approved yield (expected production for a crop year).

***When a Natural Disaster Strikes, How Do I Apply for NAP Assistance?*** When your crop or planting is affected by a natural disaster, you must notify your local FSA office by completing Part B, Notice of Loss, on Form CCC-576, Application for Payment, within 15 calendar days of the:

- natural disaster occurrence;
- final planting date, if your planting was prevented by a natural disaster;
- date damage to the crop or loss of production becomes apparent to you; or
- the normal harvest date.

To receive NAP benefits, you must complete Form CCC-576, Application for Payment, prior to the application closing date of the subsequent year. The CCC-576 requires you to provide evidence of production and note whether the crop was marketable, unmarketable, salvaged, or used differently than intended.

***How Much Production Must Be Lost to Receive a NAP Payment?*** The natural disaster must have either:

- reduced your expected unit production of the crop by more than 50 percent; or
- prevented you from planting more than 35 percent of your intended crop acreage.

Expected production is the amount of the crop produced in the absence of a natural disaster. FSA compares expected production to actual production to determine the percentage of crop loss.

***What is a Unit?*** The NAP unit includes the specific crop acreage in the county in which you have a unique crop interest. A unique crop interest is either: 100 percent interest; or a shared interest with other producers.

***How Much of My Loss Does NAP Cover?*** NAP covers the amount of loss greater than 50 percent of your expected production, based on your approved yield and reported acreage.

Farm producers shall contact a crop insurance agent if they have questions regarding whether a crop is insurable in a particular county. For questions regarding NAP coverage, producers shall contact their local FSA office or visit FSA's web site at: [www.fsa.usda.gov](http://www.fsa.usda.gov)

## **INSURANCE QUESTIONS TO CONSIDER**

### **FOR A VEGETABLE/SPECIALTY CROP PRODUCER:**

1. How much coverage do I need for adequate cash flow?
2. What are the major sources of crop weather risk in my area?
3. How much coverage can I afford?
4. Which crop insurance product will best complement my marketing plan?
5. What are the implications of a crop loss on my ability to meet my debt obligations?
6. What are the major sources of production risk?
7. Who is a local crop insurance agent so I can obtain specific information (types and levels of coverage, premium costs)
8. What is the minimum cash flow I will need?
9. What collateral will I need for operating loans?
10. What will I need to pay off the operating loan and make term loan payments?
11. What will be the impact of my net worth if I don't have adequate crop insurance coverage?

**FOR A VEGETABLE PRODUCER TO REVIEW/SHARE WITH A CROP INSURANCE AGENT:**

1. What insurance products are available in my county, including revenue insurance?
2. Do you understand my marketing and financial plans?
3. For my farm operation, what are the best insurance plans and coverages available?
6. Should I consider (stand-alone/non-subsidized) crop-hail insurance?
7. Should I consider insurance supplementals/endorsements?
8. What are the advantages of higher coverage levels (vs CAT)?
9. What are the sales closing dates for crops in my operations?
10. How do I prove/certify my yields?
11. What is the final planting date(s)?
12. What are my responsibilities now that I have signed an application for insurance? (e.g.: Acreage reporting dates, production reporting dates, notification of loss damage)

## **CROP INSURANCE PREMIUM CALCULATION & LOSS INDEMNITY SCENARIO / EXAMPLES**

The scenario/example illustrated shows the costs included when obtaining a nursery crop insurance policy (not including possible administrative fees) and the possible indemnity received in the event of a loss. Each type of policy can be customized to best fit a producer's farming situation by selecting different price and yield coverage levels, add-on features, and insurance unit designations. Premium rates vary by crop, county and insurance plan. Please note: Premiums will vary from crop to crop and county to county. Consult your local private crop insurance agent for specific premium costs.

### **Multi-Peril Crop Insurance (MPCI) Premium Calculations**

Premium Calculation - 75% coverage/100% price – Basic Unit

#### **Potatoes – Benton County – Basic Policy**

Group A (type 161) – 600 cwt/acre (APH) / \$4.50 Price / 100 acres

Premium Guarantee/acre = 600 cwt X 75 % guarantee	= 450 cwt/acre production
Premium Guarantee = 450 cwt X 100 acres	= 45,000 cwt
Premium Liability = 45000 cwt X 4.50 X 1.0	= \$202,500
Premium = 202,500 X 0.035 (rate) X 0.9 (basic unit discount)	= \$6,379
Subsidy = \$6,379 X 0.55	= \$3,508
Producer Paid premium = \$6,379 - \$3,508	= \$2,871 or 28.71 / acre

#### **Sugar Beets – Benton County**

37 tons/acre (APH) / \$36.00 Price / 100 acres

Premium Guarantee/acre = 37 tons X coverage level %	= 27.8 tons/acre prod. guar.
Premium Guarantee = 27.8 tons X 100 acres	= 2,780 tons
Premium Liability = 2,780 tons X 36.00 X 1.0	= \$100,080
Premium = 100,080 X .04818 (base rate) X 0.9 (basic unit)	= \$4,340
Subsidy = \$4,340.00 X 0.55	= \$2,387
Producer Paid premium = \$4,340 - \$2,387	= \$1,953 or 19.53 / acre

### **Indemnity Examples**

#### **Loss Example – Potatoes - Production to count = 15,000 cwt**

Guarantee Value	= \$202,500
Value Production to Count - 15,000 X 4.50	= \$ 67,500
Indemnity is \$202,500 – \$67,500	= \$135,000

#### **Loss Example – Sugar Beets – Production to count = 500 tons**

Production guarantee	= 2,780 tons
Less production to count of 500 tons	= 2,280 tons
Indemnity is 2,280 tons X \$36,00	= \$82,080 indemnity

## **RISK MANAGEMENT CHECKLIST – Crop Insurance**

### How much crop insurance do you need?

You can improve your risk management performance simply by conducting an annual risk management checkup. Information included in the following risk management checklist may help in providing a list of questions to respond to regarding your farm business situation.

Keep in mind also that there are many experts throughout the public and private sector who can visit with you about risk management strategies. These individuals may include commodity brokers, the extension service, vegetable and farm organizations, loan officer or an insurance agent.

Many are working hard to master new skills and learning how to identify new opportunities. The following questions and information should assist you toward asking your insurance agent and/or bank lender valuable questions -- and to act on what you learn.

### Do I understand what the major risks are for my vegetable crops and the likelihood of them occurring? List Risks:

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_

- ( ) Do I have four or more years of production records to prove my yields?
- ( ) Have I certified my production history with my crop insurance agent?
- ( ) Have I selected an adequate percent of insurance coverage on my portion of exposure? What coverage level do I need?
- ( ) Have I learned about all of the products that are available, including revenue insurance, including the Adjusted Gross Revenue insurance and other available vegetable revenue policies (CRC Corn)?
- ( ) Should I considered a stand-alone crop-hail or fire insurance plan?
- ( ) Have I worked closely with my lender and/or crop insurance agent to ensure they understand my marketing and financial plans?
- ( ) Do I understand the important crop insurance deadlines and what is required of me for each? ***Crop Insurance Deadlines:***

Sales closing date - last day to apply for coverage.

Cancellation date - give notice if I don't want insurance next year.  
Plant Inventory Reporting date - actual plant inventory must be provided by this date.  
Payment due date - interest charges are due beyond this date.  
Date to file notice of nursery crop damage - damage must be reported by this date.  
End of insurance period - latest date of coverage for my insurance policy.  
Debt termination date - insurance coverage for next year will be canceled if payment is not made by this date.

( ) Have I identified and utilized reliable sources and contacts to obtain helpful management information?

## **SUMMARY ON PRODUCTION RISK**

As can be seen throughout this illustration, **managing production risk** in nursery production does not necessarily involve avoiding risk, but instead, involves finding the best available combination of risk and return given a person's capacity to withstand a wide range of outcomes. Effective risk management involves anticipating outcomes and planning a strategy in advance given the likelihood and consequences of events, not just reacting to those events after they occur. That is, the four main aspects of risk management involve:

1. Identifying potentially risk events,
2. Anticipating the likelihood of possible outcomes and their consequences,
3. Taking actions to obtain a preferred combination of risk protection and expected return, and
4. Restoring (if necessary) the nursery business' capacity to implement future risk planning strategies when distress conditions have passed.

## **ACKNOWLEDGMENTS**

Jo Lynne Seufer, Risk Management Specialist, of USDA's Risk Management Agency - Spokane Regional Office compiled and authored the Managing Vegetable Production Risks section of this curriculum. Dave Paul, Director and Chris Mahelona, Risk Management Specialist of Spokane's Regional Office provided valuable insights for this manuscript.

## **MODULE/PUBLICATION/MATERIAL REFERENCES**

USDA, Introduction to Risk Management. Reference to Production Risks, USDA/Risk Management Agency, Risk Management Education (Revised December 1997)

USDA/RMA Product Development Division 2002 Crop Insurance Handbook (CIH), FCIC 18010, June 2001.

USDA/FCIC Crop Insurance Provisions: Potato (24090)

Agricultural Risk Protection Act of 2000 – Fact Sheet, June 2000, USDA/Farm Service Agency, NAP Information, Page 2.

USDA/Farm Service Agency – Noninsured Assistance Program Fact Sheet, August 2001.

Organic Resource Manual – Publication of the Washington State Department of Agriculture, funded by USDA’s SARE program, Spring 2000.

AGR Case Studies (revised January 30, 2001) – Diversified Vegetable Farm Case Studies: (by Department of Applied Economics and Management Cornell University, Ithaca, New York, Date January, 2001). Located in PDF at <http://www.aec.msu.edu/agecon/blackj/Agr.htm>

## **CROP INSURANCE COMPANIES/AGENTS**

### **Crop Insurance Agents**

All insurance policies are available exclusively from private insurance agents. A listing of local crop insurance agents can be obtained at all local USDA Service Centers or Farm Service Agency county offices, usually listed in telephone directories under U.S. Government, Department of Agriculture or at the website address: [www.rma.usda.gov/tools/agents/](http://www.rma.usda.gov/tools/agents/).

### **Crop Insurance Companies**

A list of national crop insurance companies is provided as follows:

Farmers Alliance Insurance Company  
(Blakely Crop Hail, Inc.)  
100 South East 9th Street  
Topeka, Kansas 66601-0918  
Phone: (785) 232-0937 (1-800-336-4359)  
Fax: (785) 232-0042

American Growers Insurance Company  
535 West Broadway  
Council Bluffs, Iowa 51503  
Phone: (712) 328-3918 (1-800-999-7475)  
Fax: (712) 329-5878  
Mr. Richard Gibson, Executive Vice President

Producers Lloyds Insurance Company  
P. O. Box 229  
Amarillo, Texas 79105  
Phone: (806) 372-6785 (1-800-366-2767)  
Fax: (806) 372-3826

Alliance Insurance Company  
(North Central Crop Ins. Co.)  
P. O. Box 1088  
Eau Claire, Wisconsin 54702  
Phone: (715) 834-8155 (1-800-826-7090)  
Fax: (715) 834-1899

Farm Bureau Insurance Co. of Nebraska  
5225 South 16th Street  
Lincoln, Nebraska 68501  
Phone: (402) 421-4400 Fax: (402) 421-4432

Farm Bureau Mutual Insurance Company (Iowa)  
5400 University Avenue  
West Des Moines, Iowa 50266  
Phone: (515) 225-5516 Fax: (515) 226-6070

Cigna Insurance Company  
(Rain and Hail L.L.C.)  
1501 50th Street, Suite 200  
West Des Moines, Iowa 50266-5925  
Phone: (515) 224-3070 (1-800-776-4045)  
Fax: (515) 224-3089

Farmers Mutual Hail Insurance Company of Iowa  
2323 Grand Avenue  
Des Moines, Iowa 50312  
Phone: (515) 282-9104 Fax: (515) 282-6303

Country Mutual Insurance Company  
P. O. Box 2100  
Bloomington, Illinois 61702  
Phone: (309) 821-3000 Fax: (309) 821-3538

Great American Insurance Company  
49 East Fourth Street, Suite 408  
Cincinnati, Ohio 45202-3803  
Phone: (513) 763-8400 (1-800-587-1553)  
Fax: (513) 763-8457

IGF Insurance Company  
6000 Grand Avenue  
Des Moines, Iowa 50312  
Phone: (515) 633-1000 (1-800-274-2766)  
Fax: (515) 633-1010

The Hartford  
1125 South 103rd St., Suite 300  
Omaha, Nebraska 68124  
Phone: (402) 399-8833 (1-800-295-1815)  
Fax: (402) 393-2879 or (402) 399-8012

Fireman's Fund Insurance Company  
10895 Lowell, Suite # 300  
Overland Park, Kansas 66210  
Phone: (913) 338-7800 Fax: (913) 388-7888

Rural Community Insurance Services  
3501 Thurston Avenue  
Anoka, Minnesota 55303  
Phone: (612) 427-0290 (1-800-451-3836)  
Fax: (612) 427-1591

American Agricultural Insurance Company  
225 Touhy Avenue  
Park Ridge, Illinois 60068-7056  
Phone: (847) 685-8600 Fax: (847) 685-8661

Millers Mutual Fire Insurance Company  
(Keystate Crop Insurance)  
11385 North Trimble Road  
Robinson, Illinois 62454  
Phone: (618) 546-5409 (1-800-654-2767)  
Fax: (618) 546-5650

NAU Country Insurance Companies  
6701 Highway 10, NW  
Ramsey, Minnesota 55303  
Phone: (763) 427-3770 (1-800-942-6557)  
Fax: (763) 427-6473

## EXHIBIT 1.0

### Crop Insurance Definitions

**Acreage Report** - A report required by the basic policy provisions containing, in addition to other required information, the insured's share of all acreage of an insured crop in the county whether insurable or not insurable.

**Acreage Reporting Date** - The date by which insureds are required to submit acreage reports. Acreage reports must be filed not later than the acreage reporting date contained in the Special Provisions for the county for the insured crop or as provided in the basic policy provisions.

**Actual Yield** - The yield for a crop year calculated from the producer's records and/or claims for indemnities. The actual yield is determined by dividing total production (including harvested and appraised potential production) by planted insurable acreage for annual crops and by insurable acres for perennial crops (unless production from uninsurable acreage is commingled with production from insurable acreage).

**Added Land** - is cropland acreage (irrespective of crops) added for the current crop year to the insured person's farming operation within the county.

**Added Practice, Type, or Variety (P/T/V)** - A P/T/V of the insured crop as identified on the actuarial document that requires a separate APH yield, administered on a county/crop basis, for which the insured has NOT been actively engaged in farming for a share of the P/T/V's production on the unit.

**Additional Coverage** - Plans of crop insurance providing a level of coverage equal to or greater than 65 percent (65%) of the approved yield indemnified at 100 percent (100%) of the expected market price, or comparable coverage as established by RMA.

**Administrative Fee** - The annual fee that the producer must pay in addition to the premium (if any) for additional, or catastrophic coverage.

**Appraised Production** - Production determined by the Insurance Provider for unharvested acreage, reflecting the potential production for the crop at the time of the appraisal. Appraisals made for production LOST due to insured or uninsured cause(s) of loss are not considered production for APH purposes. Only potential production remaining in the field at the time of the appraisal is used for APH purposes. (Applies to both APH appraisals or appraisals made to determine a loss.)

**Approved APH Yield/Approved Yield** - The amount of production per acre computed and approved by the verifier in accordance with RMA's Actual Production History Program (7 CFR part 400, subpart G) or, for crops not included under 7 CFR part 400, subpart G, the yield used to determine the guarantee in accordance with the crop provisions or the Special Provisions. The approved APH yield may contain up to ten consecutive APH crop years of actual and/or assigned yields.

**Assigned Yield** - A yield assigned (by the verifier) for the most recent APH crop year in the base period (by database) if carryover insureds do not file acceptable production reports by the production reporting date, as required by the crop insurance contract. The assigned yield is 75 percent of the previous year's approved APH yield. Assigned yields are used in the same manner as actual yields when calculating APH yields.

**Average APH Yield** - The sum of the actual, assigned and/or applicable "T" Yields divided by the number of yearly yields in the database (prior to yield substitutions application of yield limitations or yield floors, if applicable).

**Base Period** - Ten consecutive APH crop years immediately preceding the current policy crop year (defined in the applicable insurance policy) for which the approved APH yield is being established.

**Carryover Insured** - A person or entity who was insured the previous year without respect to the carrier or agent, determined on a crop policy (by county) basis. If the insured had an MPCI, Income Protection, Crop Revenue Coverage, or Revenue Assurance crop insurance and switches from one of the plans of insurance to another plan, that person or entity is considered a carryover insured.

**Catastrophic Risk Protection (CAT)** - The minimum level of coverage offered by RMA which meets the requirements for a person to qualify for certain other USDA program benefits. Catastrophic Risk Protection is referred to as "CAT" or "CAT coverage" in this handbook.

**Continuous Production Reports** - Production reports submitted by a producer for each consecutive APH crop year (within the base period), including the most recent APH crop year in the base period. Continuity is not interrupted if for any calendar year the crop was not planted, prevented from being planted by an insurable cause, or NOT produced for an insurable purpose. Rules for reporting continuity of records apply to applicants/insureds certifying percentages of grade or other applicable grade factors when applicable.

**Contract** - The contractual agreement between the insured and the Insurance Provider consisting of the accepted application, the Basic Provisions, the Crop Provisions, the Special Provisions, other applicable endorsements or options, the Actuarial Table for the insured crop, the Catastrophic Risk Protection Endorsement (if applicable), and the applicable regulations published in 7 CFR Chapter IV.

**County** - The political subdivision of a state listed in the actuarial table and designated on the accepted application (“county” includes acreage in a field that extends into the adjoining county or state if the county or state boundary is not readily discernable). (For quota tobacco, “county” includes any land identified by an FSA farm serial number for the county but physically located in another county.)

**Crop of Economic Significance** - A crop that has either contributed in the previous crop year, or is expected to contribute in the current crop year, 10 percent (10%) or more of the total expected value of the producer's share of all crops grown in the county. However, a crop will not be considered a crop of economic significance if the expected liability under the CAT Endorsement is equal to or less than the administrative fee (\$100 per crop per county).

**Crop Year** - APH Crop Year. For APH purposes, the term does not include any year the crop was not planted, prevented from being planted by an insurable cause, or NOT produced for an insurable purpose as provided in the crop's policy

**Example 1:** When an insured plants insurable acreage in a county to wheat for harvest as grain, that year is a crop year for APH data purposes. If the land is summerfallowed the next calendar year, that year is not a crop year for APH data purposes.

**Example 2:** A year that oats were planted as a cover crop, pastured, or put up for hay is not considered an APH crop year unless such acreage was reported and insured as "intended for harvest as grain" under the MPCCI contract.  
Policy Crop Year. The period defined by the applicable crop insurance policy.

**Database** - The data used to calculate the average/approved APH yield. A minimum of four up to a maximum of ten continuous APH CROP YEARS of production data are used. The data provided must begin with the most recent APH CROP YEAR. Years containing assigned yields do not break continuity of production data and are considered APH CROP YEARS.

**Days** - Calendar days.

**Enterprise Unit** - All insurable acreage of the insured crop in the county in which the insured has a share on the date coverage begins for the crop year (for premium computation purposes, the enterprise unit discount, if shown on the FCI-35, is in addition to the basic unit discount). An enterprise unit must consist of:

- (1) Two or more basic units of the same insured crop that are located in two or more separate sections, section equivalents, or FSA FSN's; or
- (2) Two or more optional units of the same insured crop established by separate sections, section equivalents, or FSA FSN's.

**Established Price** - The price per unit of production issued by RMA by each crop's filing date.

**Expected Market Price** - The price per unit of production (or other basis as determined by FCIC) anticipated during the period the insured crop normally is marketed by producers. This price will be set and announced by RMA not less than 15 days prior to the sales closing date for the crop. Applicable for the following crops: Barley, Corn, Grain Sorghum, Hybrid Corn Seed, Hybrid Sorghum Seed, Malting Barley, Oats, Rye, Soybeans, and Wheat.

**FCIC** - The Federal Crop Insurance Corporation, a wholly owned Government Corporation administered by the Risk Management Agency within USDA.

**Final Planting Date** - The date contained in the special provisions for the insured crop by which the crop must initially be planted in order to be insured for the full production guarantee or amount of insurance per acre.

**FSA** - The Farm Service Agency, an agency of the USDA, or a successor agency.

**FSA Farm Serial Number (FSN)** - The number assigned to the farm by the FSA county committee.

**Good Farming Practices** - The cultural practices generally in use in the county for the crop to make normal progress toward maturity and produce at least the yield used to determine the production guarantee or amount of insurance, and are those recognized by the Cooperative State Research, Education, and Extension Service as compatible with agronomic and weather conditions in the county.

**Gross Production** - Net delivered production of the commodity (by removing truck weight and other weights which are considered tare from the gross scale weight) prior to deductions made for dockage, test weight, moisture content, poor quality, foreign material, etc. For APH purposes, harvested or appraised gross production, documented in the unit of measure indicated by the crop's policy, is acceptable. However, when acceptable records that indicate dockage, low test weight, high moisture content, poor quality, foreign material, etc., are available at the time production reports are filed, gross production **MUST** be adjusted for APH purposes to reflect the same quality of production as provided in the crop's policy for loss payment purposes.

**Insurance Provider** - A company reinsured by FCIC providing crop insurance coverage to producers participating in any Federal crop insurance program administered under the Federal Crop Insurance Reform Act of 1994.

**Insured** - The named person/entity as shown on the application accepted by the Insurance Provider. This term does not extend to any other person having a share or interest in the crop (e.g.: a partnership, landlord, or any other person) unless specifically indicated on the accepted application.

**Insured Crop** - The crop defined under the Basic Provisions and the applicable Crop Provisions as shown on the application accepted by the Insurance Provider.

**Intended Crop** - A crop stated on the application submitted on or before the crop's sales closing date which the insured intended to plant the crop year for which application is made. ("Intended crop" is used in conjunction with substitute crop determinations.)

**Irrigated Practice** - A method of producing a crop by which water is artificially applied during the growing season by appropriate systems and at the proper times, with the intention of providing the quantity of water needed to produce at least the yield used to establish the irrigated production guarantee or amount of insurance on the irrigated acreage planted to the insured crop.

**Late Planted** - Acreage initially planted to the insured crop during the late planting period.

**Late Planting Period** - The period that begins the day after the final planting date for the insured crop and ends 25 days after the final planting date, unless otherwise specified in the Special Provisions. For acreage planted during the late planting period, coverage is reduced in accordance with the crop's policy provisions.

**Limited Resource Farmer** - A producer or operator of a farm with an annual gross income of \$20,000 or less derived from all sources of revenue, including income from a spouse or other members of the household, for each of the prior two years.

Notwithstanding the previous sentence, a producer on a farm or farms of less than 25 acres (aggregated for all crops), where a majority of the producer's gross income is derived from such farm or farms but the producer's gross income from farming operations does not exceed \$20,000, will be considered a limited resource farmer. (For example, a producer farming 20 acres with a total gross income of \$39,000, of which \$20,000 is farm income and \$19,000 is off-farm income, is a limited resource farmer.)

**Linkage Requirement** - The legal requirement that a producer must obtain at least CAT coverage for any crop of economic significance as a condition of receiving benefits for such crop from certain other USDA programs, unless the producer executes a waiver of any eligibility for emergency crop loss assistance in connection with the crop.

**New Insured** - A person/entity who was not insured the previous crop year without respect to the carrier (FSA or Insurance Company) or agent. If the insured had an MPCI, Income Protection, Crop Revenue Coverage, or Revenue Assurance crop insurance policy the previous crop year on the same crop/county, that person is not a new insured.

**New Producer** - (CATEGORY B CROPS ONLY) A person who has not been actively engaged in farming for a share of the production of the insured crop (producing the crop) in the county for more than two APH crop years. Formation or dissolution of an entity which includes individuals with more than two APH crop years of production history during the base period does not qualify the new entity as a new producer for APH yield determination purposes.

**Non-Contiguous** - Any two or more tracts of land whose boundaries do not touch at any point, except that land separated only by a public or private right-of-way, waterway, or an irrigation canal will be considered as contiguous.

**Person/Entity** - An individual, partnership, association, corporation, estate, trust, or other legal entity, and wherever applicable, a state or a political subdivision or agency of a state. "Person" does not include the United States Government or any agency thereof.

**Planted Acreage** - Land in which seed, plants, or trees have been placed as appropriate for the insured crop and planting method, at the correct depth, into a seedbed that has been properly prepared for planting method and production practice.

**Policy** - (also see "Contract") The provisions for insuring a specific crop.

**Practical to Replant** - The Insurance Provider's determination, after loss or damage to the insured crop, based on all factors, including, but not limited to, moisture availability, condition of the field, time to crop maturity, and marketing window, that replanting the insured crop will allow the crop to attain maturity prior to the calendar date for the end of the insurance period. It will not be considered practical to replant after the end of the late planting period, or the final planting date if no late planting period is applicable, unless replanting is generally occurring in the area. In general, unavailability of seed or plants will not be considered a valid reason for failure to replant.

**Preliminary Yield** - The APH yield calculated by the agent prior to approval by the verifier. Preliminary yields are used to provide coverage estimates and premium quotations and are calculated using the same procedure as approved APH yields.

**Prevented Planting** - Failure to plant the insured crop with proper equipment by the final planting date designated in the Special Provisions for the insured crop in the county. The insured may also be eligible for a prevented planting payment if the insured failed to plant the insured crop with the proper equipment within the late planting period. The insured must have been prevented from planting the insured crop due to an insured cause of loss that is general in the surrounding area and that prevents other producers from planting acreage with similar characteristics.

**Prior APH Yield** - The approved APH yield [item 21 of the FCI-19-A] from the previous year's APH form.

**Production Guarantee (Per Acre)** - The number of pounds, bushels, tons, cartons, or other applicable units of measure determined by multiplying the approved yield/approved APH yield per acre by the coverage level percentage elected.

**Production Report** - A written record showing the insured crop's planted acreage and annual production used to determine the insured's actual yields for insurance purposes. Production reports may be APH forms or documents containing the same information required to complete APH forms. The insured must certify acreage and production for each unit of the crop for at least the most recent APH crop year in the base period. To be acceptable, production reports must meet the requirements as outlined in this handbook and be signed, dated, and submitted by the insured on or before the PRD.

**Production Reporting Date (PRD)** - The latest date production reports will be accepted for inclusion in the database used to calculate approved APH yields for the current crop year. The PRD is the earlier of the acreage reporting date or 45 calendar days after the earliest cancellation date for the crop for the current crop year unless otherwise stated in the Special Provisions (e.g., the Sugar Beet Special Provisions in certain CA counties with a Spring, Summer, and/or Fall harvest practice defines the PRD as the acreage reporting date).

**NOTE:** For new insureds, if a crop has both a spring and fall sales closing date, and application for insurance is made after the earlier sales closing date, the PRD is the earlier of the acreage reporting date or 45 calendar days after the spring sales closing date. Insurance does not attach to the acreage planted to the type with the earlier sales closing date if application is made after the earlier sales closing date.

**Rate Yield.** The (average APH yield) used to determine the premium rate if the approved APH yield is based on a yield substitution or a yield floor.

**Replanting** - Performing the cultural practices necessary to prepare the land to replace the seed or plants of the damaged or destroyed insured crop and then replacing the seed or plants of the same crop in the insured acreage with the expectation of producing at least the yield used to determine the production guarantee.

**RMA Regional Office (RMA RO)** - The RMA Field Underwriting and Program Services Office for a designated area (states).

**RMA RO Determined Yields** - The approved APH yield determined by the RMA RO for insureds who do not provide at least four years of acceptable production reports when a "T" Yield Table is not published; or for other cases referred to the RO for yield determinations.

**Secretary** - The Secretary of the United States Department of Agriculture.

**Share** - The insured's percentage of interest in the insured crop as an owner, operator, sharecropper, or tenant at the time insurance attaches. However, only for the purposes of determining the amount of indemnity, your share will not exceed your share at the earlier of the time of loss or the beginning of harvest. Unless the accepted application clearly indicates that insurance is requested for a partnership or joint venture, or is intended to cover the landlord's or tenant's share of the crop, insurance will cover only the share of the crop owned by the person/entity completing the application. The share will not extend to any other person having an interest in the crop except as may otherwise be specifically allowed in the Basic Policy provisions.

**Cash Lease (100 Percent Share).** Acreage rented for cash is considered a cash lease. A lease containing provisions for either a minimum payment or a crop share will be considered a cash lease.

**Crop Share.** Acreage rented for a percentage of the crop will be considered a crop share lease. A lease containing provisions for both a minimum payment (such as a specified amount of cash, bushels, pounds, etc.) and a crop share will be considered a crop share lease.

**Similar Crop** - Another crop produced by the grower and classified under a broad grouping of crops such as: row crops, tree crops, vine crops, bush crops, etc. Example: Annual crops such as wheat, corn, soybeans, etc., are considered to be similar crops, dry beans, apples, green peas, safflower, etc., would also be considered similar crops.

**Substituted Yield** - A yield established by multiplying the applicable county crop "T" Yield by 60 percent.

**Temporary Yield** - A yield used (by unit) when an insured is unable to finish harvest (due to an insurable cause), or records are unavailable from the processor, marketing outlets, etc., by the production reporting date.

**Timely Planted** - Planted on or before the final planting date designated in the Special Provisions for the insured crop in the county.

**Transitional Yield ("T" Yield)** - An estimated yield provided in the Actuarial Table which is used in calculating average/approved APH yields when less than four years of actual, temporary, and/or assigned yields are available on a crop by county basis. Note: Any actuarial document references to Determined Yields ("D" Yields) are considered "T" Yields for APH purposes.

**Transitional Yield Locator Document ("T" Yield Map)** - A county map indicating area classifications and corresponding "T" Yields. "T" Area classifications are used in conjunction with the "T" Yield table to determine "T" Yields.

**Unit** - The insurable acreage of the insured CROP in the COUNTY taken into consideration when determining the approved APH yield, production guarantee/amount of insurance, and the amount of any indemnity (loss payment). Each insured crop's unit structure is defined in the policy and/or respective endorsement.

**USDA** - The United States Department of Agriculture.

**Variable “T” Yields**

**For Category B Crops** - Sixty-five, 80, 90, or 100 percent of the applicable “T” Yield based on the number of years of actual, assigned, or temporary yields provided on a crop (policy) and county by the insured.

**For Category C Crops** - Sixty-five, 80, 90, or 100 percent of the applicable “T” Yield based on the number of years of actual, assigned, or temporary yields provided for each database by the insured.

**Verifier** - An Insurance Provider authorized by RMA to calculate approved APH yields.

**Waiver (Linkage)** - An FSA document that, when signed by a producer, relinquishes that producer's eligibility for emergency crop loss assistance and satisfies linkage requirements.

**Waiver (Administrative Fees)** - A document that, when signed by limited resource farmers, exempts them from paying the administrative fee.

**Whole Farm Unit** - All insurable acreage of the insured crops in the county in which the insured has a share on the date coverage begins for each crop for the crop year.

**Written Agreement** - A document that alters designated terms of a additional coverage policy and that is authorized under the basic provisions, the crop provisions, or the Special Provisions for the insured crop.

**Yield Limitations/Yield Floor** - Adjustments made to average APH yields, when applicable, which result in the approved APH yield.

**Zero Acreage Report** - An acreage report filed by an insured that certifies that the insured does not have a share in the crop for that crop year.