



Getting Started in Ag: Enterprise Risk Analysis

Enterprise Diversification and Risk Management

Risk and uncertainty are always part of the landscape in production agriculture. Risk manifests itself in many forms: unstable prices, rising input costs, production issues, labor shortages and weather, to name just a few examples. New and beginning producers have several options for managing this risk: purchasing insurance, developing marketing plans and strategies for the outputs, or taking other steps to improve outcomes and/or increase the chances for improvement.

Another option for managing risk is diversifying to include one or more alternative enterprises. It is definitely best not to have all of your eggs in one basket. Farming and ranching should always be viewed as long-term businesses; diversification can help reduce risk and increase profitability over the long term.

Enterprise diversification generally means managing multiple enterprises within the same overall business. Diversification can take many forms, such as raising crops to feed existing livestock, taking on custom machine work to augment income, or running a completely different business, like a bed and breakfast enterprise. Multiple enterprises offer the chance to spread production risk and lower costs by complementing other activities. For example, diversification might involve raising your own hay for livestock instead of purchasing it.

While a diverse enterprise mix is often necessary for many Wyoming farms and ranches, it is important to evaluate the activities as part of a comprehensive risk management plan. This ensures that resources and capital are being put to their most productive and profitable use. It is important to understand how each of these enterprises fits into the overall business picture. Producers tend to

evaluate the operation as a whole instead of examining each individual enterprise—and all of its associated revenues and expenses—on its own.

When completed correctly, enterprise analysis can provide a measure of each enterprise's profitability and overall contribution to net income. Enterprise analysis shows how each enterprise compares to other enterprises, and its breakeven values. These metrics provide opportunities for the proactive manager to identify where to cut costs and watch for developing risks.

Enterprise Risk Analysis Course

The comprehensive course *Enterprise Risk Analysis*, available at RightRisk.org, is designed to give participants a broad understanding of the planning and overall risk management involved in enterprise analysis. The course includes an interactive self-study module, a recorded webinar with presentation slides and a question-and-answer session, and an e-book to accompany the self-paced course. The course also includes two case studies demonstrating how enterprise analysis can be applied in a broad range of situations.

Help	Resources	Topics
<h3>Summary</h3> <p> A proactive approach to enterprise risk management enables the active farm or ranch management team to: </p>		
<ul style="list-style-type: none"> ➤ Encourage proactive rather than reactive management ➤ Improve the timely identification of opportunities and threats ➤ Comply with relevant legal and regulatory requirements ➤ Improve financial reporting ➤ Improve stakeholder confidence and trust 	<ul style="list-style-type: none"> ➤ Establish a reliable basis for decision making and planning across the enterprise ➤ Effectively allocate and use resources for risk treatment as needed ➤ Improve operational effectiveness and efficiency ➤ Minimize enterprise losses ➤ Improve farm/ranch resilience in the face of uncertainty 	

Enterprise analysis includes estimating net returns by enterprise, which can help managers gather accurate information about the relative profitability and resource use by each enterprise. Accurate enterprise analysis can help managers make informed decisions about how to allocate resources across the business. For example, a producer with both a cow-calf enterprise and an alfalfa hay enterprise may think that the two complement each other. However, depending on the resources used—such as time, labor and capital utilized by the hay enterprise—it may be more cost effective to buy the hay.

For some operations, defining what constitutes an enterprise is relatively simple. For example, a farming operation that raises three or four different crops has easily defined enterprises. However, a combination crop and livestock operation with a diverse mix of activities such as raising feed, grazing aftermath or backgrounding cattle may not be as easy to sort out.

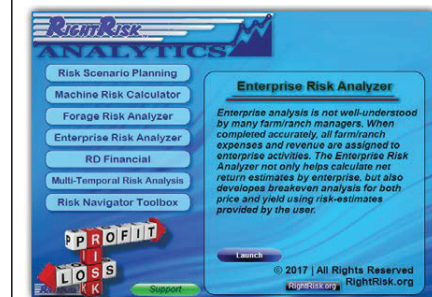
Another challenge in enterprise analysis is accurately accounting for non-cash items. This includes feed transferred to another enterprise, depreciation, and other expenses, in order to correctly allocate them to each enterprise. The

ERA course includes a segment intended to guide participants to a better understanding of how to define and break out their enterprise mix.

Risk is defined as future events for which the outcome is uncertain. Risk management should be proactive in nature; this allows the manager to address potential issues before they become problems.

ERA course users learn the five main sources of risk in an agricultural business and how to identify risk in their own situations. The course discusses strategic risk management, with a specific focus on the enterprise level. As described in the course, the risk management process is circular in nature; it is important to frequently monitor and review strategies, objectives and results in order to effectively manage risk in each enterprise.

Enterprise Risk Analyzer Tool



The ERA tool analyzes and compares different enterprises by allocating income and expenses.

- To begin using the ERA tool, visit RightRisk.org and
- 1) select the Resources tab
 - 2) select Risk Management Tools

The risk management process includes steps for establishing the context—internal and external—for each enterprise, as well as objectives and risk criteria. The internal context covers the internal environment within which the business seeks to achieve its objectives, including risk preference and biases. The external context includes the external environment, especially stakeholders and their concerns. Once risks are defined, strategies to evaluate and manage those risks can be compared and implemented.

FOR MORE INFORMATION

Visit RightRisk.org to check out the Enterprise Risk Analysis (ERA) course and tool. The ERA tool helps producers accurately identify and categorize income and expenses by enterprise. It also explores how changes in those factors may affect their overall business plan. The ERA course page includes links to webinars, an e-book, presentations and self-study materials. The ERA tool and course are just two of the many interactive budgeting and analysis resources found in the RightRisk Analytics toolbox. These resources cover a wide range of risk management topics, such as enterprise budgeting, machinery costs and forage risk analysis.

Enterprise Analysis with the Enterprise Risk Analyzer (ERA) Tool

The Enterprise Risk Analyzer (ERA) tool from RightRisk.org is designed to streamline the enterprise analysis process and make it easy to understand. The tool complements the ERA course by allocating farm and ranch expenses and income accurately across

Often producers use information for prices and yields based on imperfect information. As a result, the decisions made using these sorts of assumptions can be seriously flawed. The ERA tool helps to reduce this inherent uncertainty by using a range of values to estimate the most likely outcomes. The user then enters all 1040-Schedule F data into the tool to begin the process of

Example ERA Tool Results Output

	Alfalfa Hay	Corn Silage	Wheat	Cow-calf	Background Calves
Break-Even YIELD Analysis					
PRICE PER ENTERPRISE UNIT					
Minimum	65	22	2.85	1.45	1.25
Most Likely	85	30	3.75	1.75	1.4
Maximum	120	45	4.5	2	1.5
BREAK-EVEN YIELD - CASH EXPENSES					
Minimum	2.16	17.84	96.22	305.28	303.75
Most Likely	3.05	26.77	115.47	348.89	325.45
Maximum	3.99	36.50	151.93	421.07	364.50
BREAK-EVEN YIELD - GROSS EXPENSES					
Minimum	3.76	25.38	138.83	420.41	406.53
Most Likely	5.31	38.07	166.60	480.46	435.57
Maximum	6.94	51.92	219.21	579.87	487.84
Probability Analysis (click button at right)					
	<input type="button" value="Graph"/>	<input type="button" value="Graph"/>	<input type="button" value="Graph"/>	<input type="button" value="Graph"/>	<input type="button" value="Graph"/>

all enterprises and providing performance analytics. Users first identify the individual enterprises in their business and then allocate expected yields and associated prices.

The ERA tool accounts for the inherent risk involved with projecting prices and yields by requiring the user to enter a range of expected values—maximum, minimum and most likely—in a forward-looking framework.

allocating expenses to each enterprise. Once the relevant information is entered, the ERA tool generates results in tabular and graphical outputs, providing net income and breakeven analysis. These results are divided into yield and price analysis, as well as overall revenue and expense analytics by enterprise. The ERA tool also generates probability curves showing the likelihood of selected outcomes.

ENTERPRISE RISK ANALYSIS

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CLICK a link below to access a module component:

1. [Enterprise Risk Analysis self-study materials](#)
2. [Enterprise Risk Analysis webinar presentation slides](#)
3. Enterprise Risk Analysis webinar recording:
 - [Introduction \(5 min\) | MP3 format](#)
 - [ERA module - overview \(10 min\) | MP3 format](#)
 - [ERA module - application \(10 min\) | MP3 format](#)
 - [Q&A Session \(13 min\) | MP3 format](#)
4. [Enterprise Risk Analysis eBook](#)
5. [Enterprise Risk Analysis INFOGRAPHIC](#)
6. [ERA Slides](#)