PRODUCTION PLAN

The production plan conveys the type and quantity of commodities to be produced. The production plan pairs information from the resource inventory and financial records to serve as a realistic estimate of current activities and their anticipated financial results. A thorough production plan should detail all enterprises on an operation (crop, livestock, and other) so that scheduling of labor and financial resources can be easily examined.

The production plan should provide a basis for projecting future operational activities and alternative enterprises. While changes will occur, the production plan serves to document historical performance and project the future direction of the business. Crop production plans should include the estimated acreage and yield for each crop. Estimated production levels can then be combined with anticipated prices to generate some of the figures needed for the financial component. The livestock production plan must clearly identify all related production information, including the size of the herd, cull rates, weaning rates, weaning weights, rates of gain, purchase price, sales prices, etc. In addition, details regarding the replacement herd and breeding herd should be described.

Crop Production

For crop farms, the production plan should include the estimated acreage for each crop for each year (crop rotation) and an estimated yield for each crop. Other items that should be documented include: historical yields, government payment information, variable costs of production, insurance coverage, and production practice considerations. Table 1 provides a worksheet to help identify those components that define the crop production plan. This worksheet is organized into six sections: unit information, cost items, crop insurance, other crop information, production history, and hail insurance data. A crop production worksheet should be completed for every unit in the operation. Units may be defined by Farm Service Agency (FSA) farm numbers, fenced pastures, enterprise operations, geographic location, or any other logical manner that enables the operator to account for specific entities.

The basis for estimating costs of production for cropping enterprises begins with an accounting of variable input requirements and prices for items such as seed, fertilizer, herbicide, irrigation fuel, and harvesting. Since land ownership/lease terms differ, land tenure considerations can be defined through the line labeled "Landowner's Share of Production" or on the line labeled "Cash Lease Rate" in Table 1. In the case of share lease agreements, landowner's share of variable costs may be indicated by specifying the correct percentage in the column to the right of the relevant cost item. Variable cost estimates under each crop should not reflect a discount for landowner's share, regardless of the land tenure situation. These considerations are accounted for on an item by item basis according to the figures specified under the column marked, "LL Share %."

Crop insurance is also reported on Table 1 including type of coverage, yield and price election, premium and hail addendum. More detailed hail insurance data can be reported to page 2 of Table 1. To better distinguish local and regional practices, other crop information such as irrigation method, plant gene type, planting pattern, purpose, practice, and environmental considerations can be noted. An important component of this crop production section is the reporting of historical and Average Production History (APH). These histories allow the producer to determine the amount and variation of production risk associated with each crop activity.

Livestock Production

The next aspect of the production plan involves detailing livestock production. The livestock production plan must clearly identify all related production information, including the size of the herd, cull rates, weaning rates, weaning weights, rates of gain, purchase price, sales prices, etc. While it is obvious that a description of livestock production would differentiate between livestock species (cattle, goats, hogs, etc.), it must also detail differences that occur within species (i.e. the differences between the cow-calf enterprise and a stocker enterprise) or within production systems (i.e. commercial vs. registered). For illustration purposes, a cattle operation will be the focus of the remaining discussion. However, similar analysis should be completed for each livestock species enterprise.

Cow-Calf Enterprises

Table 2 provides a worksheet to help identify those components that define a cow-calf component of a livestock production plan. This worksheet contains information detailing inventory numbers, calf crop, sale weights, expected replacement costs and sales prices, costs of production, cattle transfers, feed requirements, and historical production records

Livestock numbers are fluid throughout the year with births, deaths, and transfers into and out of the production system. The first section of Table 2 serves to provide a snapshot of livestock numbers at a given point in time and needed replacements for the anticipated cattle transferred out of the herd. The next section details information pertaining to the expected calf crop. Calving percentage, death loss, and retain/cull inventories are identified.

The third section of Table 2 identifies the expected sale weights for various classes of cattle. Production records and previous year's sales tickets are usually a good source for estimating these numbers. The fourth section identifies the expected purchase costs for replacement livestock. Producers will need to use current estimates for these replacement costs which are based on prices for the type, caliber, and location of the livestock they intend to purchase. As such, these replacement costs may be higher than the average prices reported through traditional livestock sales reports. The fifth section details expected sales prices for various classes of cattle which provide a basis for estimating revenue. These price projections can be gathered from historical sales receipts, recent sales reports, or projections from other marketing entities.

The sixth section of Table 2 focuses on costs of production. Typical production expense items such as veterinarian/medicine, marketing, minerals, and transportation are listed. Each of these cost estimates should be provided on a per-head basis. The next section identifies livestock inventory transfers to describe the movement of calves into a stocker or feedlot production system. The last section on page 1 of Table 2 describes the supplemental feed requirements. This should include all purchased feed including hay, grain or protein supplements (range cubes, creep feed, etc.).

Page 2 of Table 2 completes the cow-calf worksheet. These sections document historical calf sale weights and calf crop percentages as well as historical prices received for various classes of cattle. Diligent record-keeping over time will help to complete these sections and also provide refinement of projections for planning in future periods and insight into market price trends.

Stocker Cattle

A worksheet summarizing essential details of a stocker cattle enterprise is shown in Table 3. A stocker cattle enterprise can take many forms: purchased stockers, raised stockers, stockers raised on a pound-of-gain basis or generating a per-head/per-month grazing fee, etc. Each of these arrangements retains a unique risk/return opportunity. When applicable, a separate stocker cattle worksheet should be completed to differentiate each circumstance. This enables the producer to evaluate the profitability of stocker cattle as an enterprise as well as the most favorable structure for a stocker cattle enterprise. Table 3 is organized into five sections: herd information, costs of production, feed requirements, historical gain information, and historical pricing information.

The first section of Table 3 details basic information such as inventory numbers, lease terms (if applicable), purchase/transfer dates, death loss, purchase/sales price, daily gain, and grazing period. The first column specifies current year data, while the second column can be used to document future plans. The second section compiles stocker cattle expense items. These items should be provided on a dollar per head basis. The third section (on page 2 of Table 3) requests information regarding feed requirements for stockers. This should include all purchased feed including hay, grain or protein supplements (range cubes, creep feed, etc.). The fourth section profiles the historical weight gains. This is defined by in-weights, out-weights, and days grazed/fed. The final section chronicles historical purchase and sales prices or contract rates (\$/pound-of-gain or \$/head/month).

Production Calendar

Another useful component of a production plan is the production calendar. A production calendar can be constructed for any preferred time frame; however a monthly production calendar is usually sufficient to identify key labor and management tasks and periods of critical business activity. One way to begin construction of a production calendar is to print a monthly cash flow report from a previous year. Income items typically have

associated sales (crop or livestock) activities or transactions that required some type of management activity. Likewise, large expense transactions typically reflect either anticipated management activities (such as a seed expense in preparation for planting) or utilization of production inputs that also document some level of activity. As such, a review of these items from the monthly cash flow report can help to identify the underlying management and production activities that were associated.

A production calendar can be constructed with a central focus on describing on-going developments of an enterprise. This type of production calendar identifies critical periods like planting, growing, and harvesting in the case of crops; or breeding and calving for livestock. With enterprise focused production calendars, the critical periods of activity for all enterprises are combined on a monthly calendar so that periods of overlap and inactivity can be easily determined and anticipated. This type of production calendar is useful when land-use considerations and scheduling are major management concerns.

Another type of production calendar focuses on labor activity. A labor focused production calendar is useful when time management or delegation of activities is a major concern. Table 4 illustrates the format of a monthly production calendar focusing on labor activity. Regardless of which type of production calendar is chosen, the primary usefulness of a production calendar is to enable management to efficiently plan and schedule resource (land, labor and capital) requirements for the full year.

Cash Flow Timing

Table 5 depicts a framework for examining the timing of monthly income and direct expense flows as a percentage of total income and direct expenses for the year. Once again, a monthly cash flow report is the basis for putting together a cash flow timing summary. This type of information is useful to examine financial resources available and demands upon those resources for a given production plan during the calendar year. An examination of cash flow timing enables management to prepare for periods when expenses are expected to accrue before revenues are realized. It also allows management to project how alternative enterprises or changes to the production plan might affect the timing of revenues and expenses.

Conclusion

A thorough description of the production plan should clearly define management's scheduling of resources needed for the crop/livestock enterprises that have been chosen. The production plan will include all projected and historical production data needed to ensure that this plan is based on realistic and achievable levels of performance. A production calendar allows for examining the deployment plan for labor, land, or other essential inputs. Finally, a cash flow timing schedule will summarize monthly revenues and expenses to enable planning of financial resources for the projected production plan or alternative enterprises.

Table 1. Crop Production Summary.

Producer:	 Unit:
Unit Description:_	

Planted Acres Budgeted Yield (units/acre) Actual Yield (units/acre) Crop Price LDP Base Acres CCP Yield Direct Payment Yield Landowner's Share of Production Cost Items Cost Share of Production Cost (S/acre) Fertilizer Cost (S/acre) Horbicide Cost (Unit Info	Crop:	Crop:		Crop:	Crop:	
Actual Yield (units/acre) Crop Price LDP Base Acres CCP Yield Direct Payment Yield Landowner's Share of Production Landowner's Share of Production Landowner's Share of Production Cost Items Cost Share Sha	Planted Acres						
Actual Yield (units/acre) Crop Price LDP Base Acres CCP Yield Direct Payment Yield Landowner's Share of Production Landowner's Share of Production Landowner's Share of Production Cost Items Cost Share Sha	Budgeted Yield (units/acre)						
Crop Price LDP Base Acres CCP Yield Direct Payment Yield Landowner's Share of Production LL Share Cost Share							
LDP	Crop Price						
CCP Yield Direct Payment Yield Landowner's Share of Production Cost Items Cost (\$\frac{\text{Share}}{\sqrt{\text{Share}}}\) Seed Cost (\$\frac{\text{Share}}{\sqrt{\text{Share}}}\) Fertilizer Cost (\$\frac{\text{Share}}{\sqrt{\text{Share}}}\) Herbicide Cost (\$\frac{\text{Share}}{\sqrt{\text{Share}}}\) Insecticide Cost (\$\frac{\text{Share}}{\sqrt{\text{Share}}}\) Insecticide Cost (\$\frac{\text{Share}}{\text{Share}}\) Insectic Cost (\$\frac{\text{Share}}{\text{Share}}\) Insectic Cost (\$\frac{\text{Share}}{\text{Share}}\) Insectic Cost (\$\frac{\text{Share}}{\text{Share}}\) Insectic Cost (\$\frac{\text{Share}}{	•						
CCP Yield Direct Payment Yield Landowner's Share of Production Cost Items Cost (\$\frac{\text{Share}}{\sqrt{\text{Share}}}\) Seed Cost (\$\frac{\text{Share}}{\sqrt{\text{Share}}}\) Fertilizer Cost (\$\frac{\text{Share}}{\sqrt{\text{Share}}}\) Herbicide Cost (\$\frac{\text{Share}}{\sqrt{\text{Share}}}\) Insecticide Cost (\$\frac{\text{Share}}{\sqrt{\text{Share}}}\) Insecticide Cost (\$\frac{\text{Share}}{\text{Share}}\) Insectic Cost (\$\frac{\text{Share}}{\text{Share}}\) Insectic Cost (\$\frac{\text{Share}}{\text{Share}}\) Insectic Cost (\$\frac{\text{Share}}{\text{Share}}\) Insectic Cost (\$\frac{\text{Share}}{	Base Acres						
Direct Payment Yield Landowner's Share of Production Cost Items Seed Cost (\$/acre) Fertilizer Cost (\$/acre) Herbicide Cost (\$/acre) Insecticide Cost (\$/acre) Fungicide Cost							
Landowner's Share of Production Cost Share Cost Share Share Cost Share							
Cost Items							
Seed Cost (\$/acre)		C - r4	Cont		C4	Cont	
Fertilizer Cost (\$/acre)		Cost	Cost		Cost	Cost	
Herbicide Cost (\$/acre) Insecticide Cost (\$/acre)	· /			1			
Insecticide Cost (\$/acre) Fungicide Cost (\$/acre) Custom Application Cost (\$/acre) Custom Application Cost (\$/acre) Custom Application Cost (\$/acre) Custom Application Fuel Cost (\$/acre) Custom Fuel Cost (\$/acre)	()						
Fungicide Cost (\$/acre) Custom Application Cost (\$/acre) Scouting & Other Cost (\$/acre) Irrigation Fuel Cost (\$/acre) Irrigation Method Irrigation Method Irrigation Method Irrigation Pattern Irrigation Pattern Irrigation Pattern Irrigation Method Irrigation Pattern Irrigation Pattern Irrigation Pattern Irrigation Method Irrigation Pattern Irrigation Method Irrigation Pattern Irrigation Pattern Irrigation Method Irrigation Pattern Irrigation Method Irrigation Pattern Irrigation Method Irrigation Pattern Irrigation Irrigati	` ,						
Custom Application Cost (\$/acre) Scouting & Other Cost (\$/acre) Irrigation Fuel Cost (\$/acre) Tillage & Harvest Fuel Cost (\$/acre) Variable Harvesting Cost (\$/unit) Variable Harvesting Cost (\$/acre) Boll Weevil Cost (\$/acre) Labor Costs (\$/acre) Cash Lease Rate (\$/acre) Crop Insurance Information Type of Coverage Yield Coverage Price Coverage Premium Hail Exclusion (Y/N) Hail Insurance (Y/N) Other Crop Information Irrigation Method Gene Type Planting Pattern Purpose							
Scouting & Other Cost (\$/acre) Irrigation Fuel Cost (\$/acre) Tillage & Harvest Fuel Cost (\$/acre) Variable Harvesting Cost (\$/unit) Variable Harvesting Cost (\$/acre) Boll Weevil Cost (\$/acre) Labor Costs (\$/acre) Cash Lease Rate (\$/acre) Crop Insurance Information Type of Coverage Yield Coverage Price Coverage Premium Hail Exclusion (Y/N) Hail Insurance (Y/N) Other Crop Information Irrigation Method Gene Type Planting Pattern Purpose							
Irrigation Fuel Cost (\$/acre)							
Tillage & Harvest Fuel Cost (\$/acre) Variable Harvesting Cost (\$/unit) Variable Harvesting Cost (\$/acre) Boll Weevil Cost (\$/acre) Boll Weevil Cost (\$/acre) Boll Weevil Cost (\$/acre) Labor Costs (\$/acre) Cash Lease Rate (\$/acre) Crop Insurance Information Type of Coverage Yield Coverage Price Coverage Premium Hail Exclusion (Y/N) Hail Insurance (Y/N) Type Ofther Crop Information Irrigation Method Gene Type Planting Pattern Purpose							
Variable Harvesting Cost (\$/unit) Variable Harvesting Cost (\$/acre) Boll Weevil Cost (\$/acre) Labor Costs (\$/acre) Labor Costs (\$/acre) Cash Lease Rate (\$/acre) Crop Insurance Information Type of Coverage Yield Coverage Price Coverage Premium Hail Exclusion (Y/N) Hail Insurance (Y/N) Other Crop Information Irrigation Method Gene Type Planting Pattern Purpose							
Variable Harvesting Cost (\$/acre) Boll Weevil Cost (\$/acre) Labor Costs (\$/acre) Cash Lease Rate (\$/acre) Crop Insurance Information Type of Coverage Yield Coverage Price Coverage Premium Hail Exclusion (Y/N) Hail Insurance (Y/N) Other Crop Information Irrigation Method Gene Type Planting Pattern Purpose	Tillage & Harvest Fuel Cost (\$/acre)						
Boll Weevil Cost (\$/acre) Labor Costs (\$/acre) Cash Lease Rate (\$/acre)	Variable Harvesting Cost (\$/unit)						
Labor Costs (\$/acre) Cash Lease Rate (\$/acre) Crop Insurance Information Type of Coverage Yield Coverage Price Coverage Premium Hail Exclusion (Y/N) Hail Insurance (Y/N) Other Crop Information Irrigation Method Gene Type Planting Pattern Purpose	Variable Harvesting Cost (\$/acre)						
Cash Lease Rate (\$/acre) Crop Insurance Information Type of Coverage Yield Coverage Price Coverage Premium Hail Exclusion (Y/N) Hail Insurance (Y/N) Other Crop Information Irrigation Method Gene Type Planting Pattern Purpose Purpose	Boll Weevil Cost (\$/acre)						
Crop Insurance Information Type of Coverage Yield Coverage Price Coverage Premium Hail Exclusion (Y/N) Hail Insurance (Y/N) Type Other Crop Information Irrigation Method Gene Type Planting Pattern Purpose Purpose	Labor Costs (\$/acre)						
Type of Coverage Yield Coverage Price Coverage Premium Hail Exclusion (Y/N) Hail Insurance (Y/N) Other Crop Information Irrigation Method Gene Type Planting Pattern Purpose Purpose	Cash Lease Rate (\$/acre)						
Yield Coverage Price Coverage Premium Hail Exclusion (Y/N) Hail Insurance (Y/N) Trigation Method Gene Type Planting Pattern Purpose Purpose	Crop Insurance Information						
Price Coverage Premium Hail Exclusion (Y/N) Hail Insurance (Y/N) Other Crop Information Irrigation Method Gene Type Planting Pattern Purpose Purpose	Type of Coverage						
Premium Hail Exclusion (Y/N) Hail Insurance (Y/N) Other Crop Information Irrigation Method Gene Type Planting Pattern Purpose	Yield Coverage						
Hail Exclusion (Y/N) Hail Insurance (Y/N) Other Crop Information Irrigation Method Gene Type Planting Pattern Purpose	Price Coverage						
Hail Insurance (Y/N) Other Crop Information Irrigation Method Gene Type Planting Pattern Purpose	Premium						
Other Crop Information Irrigation Method Gene Type Planting Pattern Purpose	Hail Exclusion (Y/N)						
Irrigation Method Gene Type Planting Pattern Purpose	Hail Insurance (Y/N)						
Gene Type Planting Pattern Purpose	Other Crop Information						
Planting Pattern Purpose	Irrigation Method						
Planting Pattern Purpose							
Purpose							
Practice	Practice						
Environmental	Environmental						

Notes:
Type of Coverage: CAT, APH/MPCI, CRC, IP
Irrigation Method: dry, pivot, furrow, Lepa, side roll, drip, flood, semi-irrigated
Gene Type: None, Bt, Roundup Ready, Bt + Roundup Ready
Planting Pattern: solid, skip row, ultra narrow row
Purpose: commercial, commercial/graze, graze, feed, seed, food
Practice: common, minimum till, no till
Environmental: conventional, organic

Historical & APH Yields

Historical & APH Yields	Crop: Whea	at	Crop: Wh	eat	Crop: Sorgl	num	Crop: Pass	ture
Year	Historical Yield	APH Yield						
1996								
1997								
1998								
1999								
2000								
2001								
2002								
2003								
2004								
2005								
T-Yield								

Hail Insurance Data

Insurance Data	Crop: Wheat	Crop: Wheat	Crop: Sorghum	Crop: Pasture
Coverage				
Premium				
Frequency				
Severity				
Loss Standard Deviation				
Exclusion				

Table 2. Summary of Cow Calf Enterprise.

Producer:	· · · · · · · · · · · · · · · · · · ·		Unit:		
Unit Description:					
Summary of Cattle I)ata	Expe	ected Calf Produc	ction	
Mature Cows Jan 1		Calving Percenta	ge		
Cows Culled		Heifer Calves Bo	rn		
Cows that Died		Heifer Calves tha	t Died		
Needed Replacements		Replacement Hei	fers (Jan 1)		
Replacements Raised		Replacements cul	lled		
Replacement Heifers Bought		Bred Replacemer	nts		
Mature Bulls Jan 1		Bred Replacemer	nts Sold		
Bulls Culled		Bred Replacemer	nts that Died		
Bulls that Died		Bull Calves Born	l		
Needed Bull Replacements		Bull Calves that I	Died		
Replacement Bulls Raised		Bull Calves Sold			
Herd Bulls Bought		Bull Calves held	for Replacement		
		Replacement Bul	ls (Jan 1)		
Expected Sale Weights Fo	or Cattle	e Replacement Bul	ls Sold		
Cull Cows		Replacement Bul	ls that Died		
Cull Replacement Heifers					
Cull Bulls		Expected R	Replacement Cost	t \$/head	
Cull Replacement Bulls		Replacement Hei	fers		
Weaned Heifers		Bull Yearlings			
Weaned Steers		Mature Cows			
		Mature Bulls			
Expected Sales Price	ce		of Production	\$/head	
Culled Cows		Veterinarian/Med	Veterinarian/Medicine		
Culled Replacement Heifers		Marketing			
Culled Bulls		Check-off			
Culled Replacement Bulls		Salt and Mineral	Salt and Mineral		
Weaned Heifers		Grazing			
Weaned Steers		Hauling			
Bred Replacement Heifers		Other			
Fed Cattle					
C-44- T		F 11.4 F.,4	C41	F 31.4	
Cattle Transferred to Stock	ker and	reediot Enterprises	Stocker	Feedlot	
Weaned Heifers				_	
Weaned Steers					
Annual 6	'unnlam	ontal Food Dogwinsm	anta fan Cattla		
	uppiem	ental Feed Requirem		D. 1. (77. 1)	
Name of Feedstuff		Pounds/Head/	Year	Price/Unit	

Table 2 (cont.). Summary of Cow Calf Enterprise.

Producer:	Unit:
Unit Description:	

Historical Cattle Production

Year	Calf Sale Weight	Calf Crop %
1996		
1997		
1998		
1999		
2000		
2001		
2002		
2003		
2004		
2005	·	·

Historical Prices Received for Cattle

Year	Steer Price	Heifer Price	Cow Price	Bull Price
1996				
1997				
1998				
1999				
2000				
2001				
2002				
2003				
2004				
2005				

Table 3. Summary of Stocker Enterprise. Producer: ______ Unit #: _____ Unit Description: _____

Unit Description:	_	
Stocker Herd Information		
	Current Year	Years 2-10
Stockers on hand Jan 1.		
Average weight per head of stockers Jan 1.		
Crop Stockers are tied too.		
Stocker Lease Terms (Select ONE)		
\$/lb of gain		
\$/cwt on weight		
\$/acre		
\$/head		
Group 1. (purchased and sold in different year)		
Stocker Purchase date		
Sale Date		
On weight after shrink for Fall Stockers		
Death loss		
Number Purchased		
Purchase Price		
Sale Price		
Daily gain		
Decision date to final sale		
#transferred in		
#transferred out		
Acres Grazed		
Answer Next two only if using graze out rule		
Normal Pull-off date		
Net Revenue difference to Pull-off cattle		

Stocker Cattle Costs of Production (\$/head)	
Vet, Medicine & Supplies	
Marketing/Commission	
Utilities	
Salt and Mineral	
Custom Services	
Hauling, Fuel, Lube Cost	
Labor	

Unit Description:

Annual Feed Requirements for Stockers					
Feed	Feed/Head/Day	Price/Unit			

Historic	Historical Gain - Stocker Calf Production					
Year	In-weight	Out-weight	Number of Days			
2004						
2003						
2002						
2001						
2000						
1999						
1998						
1997						
1996						
1995						

Optional Pricing Histories									
Year	Stocker Purchase Price (\$/lb)	Stocker Sale Price (\$/lb)	Contract Rates (\$/lb of gain or \$/head/month)						
2004			N/A						
2003									
2002									
2001									
2000									
1999									
1998									
1997									
1996									
1995									

 Table 4. Production Calendar for January through June.

	Jan	Feb	Mar	Apr	May	Jun
Activity/ Personnel						
Enterprise/ Input /Rate						

$\begin{tabular}{ll} Table 4 (cont.). & Production Calendar for July through December. \\ \end{tabular}$

	Jul	Aug	Sept	Oct	Nov	Dec
Activity/ Personnel						
Enterprise/ Input /Rate						

Table 5. Cash Flow Timing.

	J	F	M	A	M	J	J	A	S	0	N	D	Total
% of Revenue													100%
% of Expenses													100%

PRODUCTION PLAN TTAP Enterprises

The primary activities of TTAP Enterprises include a commercial cattle herd, stocker operation, wheat production for grazing and grain, and sorghum production. TTAP Enterprises owns 6,000 acres of which 1,000 acres are planted to wheat (200 acres are double cropped grain sorghum) and 5,000 acres are native pasture. Approximately 500 acres of wheat are harvested each year for grain and the remaining 500 acres are grazed out with stocker calves. The operation leases an additional 5,000 acres of native pasture at a cash rental rate of \$4.25 per acre.

Table 1 illustrates a summary of TTAP Enterprise's crop activities. Cropping activities are limited to wheat (both grazed and harvested) and grain sorghum production. Because of dryland cropping conditions, TTAP Enterprises expects an average wheat production of 30 bushels per acre and 21 hundred weights of sorghum production. The crop land has a Farm Service Agency base of 500 acres at 30 bushels per acre for direct and countercyclical government payments. Total variable cost for harvested wheat averages \$41.20 per acre while grazed wheat variable cost is expected to be about \$25.50 per acre. Variable cost for sorghum production averages \$41.20 per planted acre. TTAP Enterprises insures only the 500 acres of wheat that is expected to be harvested with a Crop Revenue Coverage (CRC) policy. A ten year historical production for wheat ranges from 12 to 39 bushels per acre.

Table 2 summarizes TTAP Enterprise's cow-calf operation. TTAP Enterprises prides itself in the production of quality beef. Currently there are 400 head of cows and 60 head of heifers that are retained for replacement each year. The operation has experienced an above average calving percentage of 88% for the past few years. TTAP Enterprises expects a death loss of 2.5% on cows and another 6% on calves before weaning. Weaning weights average 450 pounds for heifers and 475 for steers. TTAP Enterprises currently has 16 bulls and replaces about four bulls every year.

A summary of TTAP Enterprise's stocker operations is shown in Table 3. TTAP Enterprises preconditions and transfers an average of 272 head of calves to a stocker operation. To enhance the stocker cattle enterprise, TTAP Enterprises purchases 100 stockers when grazing availability permits to maximize utilization of the wheat pasture. TTAP Enterprises expects about a \$0.10 to \$0.12 rollback on purchased stocker calves. Stockers have historically gained 1.5 to 2.0 pounds per day depending on weather and crop conditions. TTAP Enterprises does little or no forward pricing of their calves. By retaining ownership in their calves, TTAP Enterprises hopes to capitalize on the value that is added to their calves through the sale of heavier animals ready for the feedlot.

Table 4 shows TTAP Enterprise's production calendar. Each major activity that takes place during the year is placed in the month that it occurs. In addition to detailing the activity, the personnel responsible for the action, the associated enterprise, and other technical data is reported on the production calendar. April, May, and June are busy

months for TTAP Enterprises because sorghum is planted, wheat is harvested, and stockers are shipped. Activities during the Fall months are also time constrained as wheat is planted, cows are palpated, and stocker cattle are purchased and vaccinated. TTAP Enterprise's production calendar engages each member of the team to plan and coordinate their efforts.

TTAP Enterprises places a great deal of importance on bookkeeping. Because of diligent efforts put forth by Julie Rancher, TTAP Enterprises is able to develop a table of cash flow timing. Table 5 illustrates the percentage of revenues and expenses by month for TTAP Enterprises. The majority of revenue is received in May and by June over 82% of revenue is realized. Although the stream of expenses for the year is more uniform than incomes, most expenses are realized in the month of June when land and lease payments are due.

Table 1. Crop Production Summary, Owned Land - TTAP Enterprises.

Producer:	TTAP Enterprises	Unit:	1	
Unit Description	on:Home Place			

Unit Info	Crop: Who	eat	Crop: Wh	eat	Crop: Sorghum		Crop: Pasture	
Planted Acres	500		500)	200		500)()
Budgeted Yield (units/acre)	30 b	u	30 b	u	21 cv	vt	2000 lb	
Actual Yield (units/acre)	30 b	u	30 b	u	21 cv		2000	
Crop Price	3.25		N/A		3.25		N/	
LDP								
Base Acres	500		500)	0		0	
CCP Yield	30		30		0		0	
Direct Payment Yield	30		30		0		0	
Landowner's Share of Production	100		100)	100)	10	
Cost Items	Cost	LL Share %	Cost	LL Share %	Cost	LL Share %	Cost	LL Share %
Seed Cost (\$/acre)	8.00		8.00		8.00			
Fertilizer Cost (\$/acre)	12.50		12.50		12.50			
Herbicide Cost (\$/acre)	5.00		5.00		5.00			
Insecticide Cost (\$/acre)								
Fungicide Cost (\$/acre)								
Custom Application Cost (\$/acre)								
Scouting & Other Cost (\$/acre)								
Irrigation Fuel Cost (\$/acre)								
Tillage & Harvest Fuel Cost (\$/acre)								
Variable Harvesting Cost (\$/unit)								
Variable Harvesting Cost (\$/acre)	2.70				2.70			
Boll Weevil Cost (\$/acre)								
Labor Costs (\$/acre)	13.00				13.00			
Cash Lease Rate (\$/acre)								
Crop Insurance Information								
Type of Coverage	CRO	7						
Yield Coverage	0.65	i						
Price Coverage	1							
Premium	4.70)						
Hail Exclusion (Y/N)	N							
Hail Insurance (Y/N)	N							
Other Crop Information								
Irrigation Method	Dry		Dry		Dry	,		
Gene Type	None		Non		Non			
Planting Pattern	Solid	d	Solie	d	Solie	d		
Purpose	Comme		Graz			Commercial		
Practice	Comm		Comm		Common			
Environmental	Convent		Convent		Convent			

Notes:
Type of Coverage: CAT, APH/MPCI, CRC, IP
Irrigation Method: dry, pivot, furrow, Lepa, side roll, drip, flood, semi-irrigated
Gene Type: None, Bt, Roundup Ready, Bt + Roundup Ready
Planting Pattern: solid, skip row, ultra narrow row
Purpose: commercial, commercial/graze, graze, feed, seed, food
Practice: common, minimum till, no till
Environmental: conventional, organic

Table 1 (cont.). Crop Production Summary, Owned Land - TTAP Enterprises.

Producer:	TTAP Enterprises	Unit:1
Unit Descript	tion: Home Place	

Historical & APH Yields

Historical & APH Yields	Crop: Whea	at	Crop: Wheat Crop: Sorghum Crop: Pastu			ture		
Year	Historical Yield	APH Yield	Historical Yield	APH Yield	Historical Yield	APH Yield	Historical Yield	APH Yield
1996	28	28	28	28	27.3	N/A		
1997	12	28	12	28	33.3	N/A		
1998	24	28	24	28	43.33	N/A		
1999	32	N/A	32	N/A	10.09	N/A		
2000	36	N/A	36	N/A	42.0	N/A		
2001	29	N/A	29	N/A	25.33	N/A		
2002	31	N/A	31	N/A	40.33	N/A		
2003	25	N/A	25	N/A	33.75	N/A		
2004	39	N/A	39	N/A	20.34	N/A		
2005	32	N/A	32	N/A	49.06	N/A		
T-Yield	28		28		33			

Hail Insurance Data

Insurance Data	Crop: Wheat	Crop: Wheat	Crop: Sorghum	Crop: Pasture
Coverage	None	None	None	
Premium				
Frequency				
Severity				
Loss Standard Deviation				
Exclusion				

Table 1. Crop Production Summary, Leased Land - TTAP Enterprises.

Producer:	TTAP Enterprises	Unit:	<u>2</u>	
Unit Descript	ion: Leased Property			

Planted Acres	Unit Info	Crop: Pas	ture	Crop:		Crop:		Crop:	
Budgeted Yield (units/acre) 2,000 lb	Planted Acres	5,00	0						
Actual Yield (units/acre) 2,000 lb	Budgeted Yield (units/acre)								
Crop Price N/A		2,000	lb						
LDP	Crop Price	N/A							
CCP Yield O									
CCP Yield O	Base Acres	0							
Landowner's Share of Production 100		0							
Cost Items	Direct Payment Yield	0							
Cost Items	Landowner's Share of Production	100)						
Fertilizer Cost (\$/acre)	Cost Items	Cost	Share	Cost	Share	Cost	Share	Cost	Share
Herbicide Cost (\$/acre)	Seed Cost (\$/acre)								
Insecticide Cost (\$/acre)	Fertilizer Cost (\$/acre)								
Fungicide Cost (\$/acre) Custom Application Cost (\$/acre) Scouting & Other Cost (\$/acre) Irrigation Fuel Cost (\$/acre) Irrigation Fuel Cost (\$/acre) Tillage & Harvest Fuel Cost (\$/acre) Variable Harvesting Cost (\$/acre) Variable Harvesting Cost (\$/acre) Boll Weevil Cost (\$/acre) Weevil Cost (\$/acre) Labor Costs (\$/acre) Weevil Cost (\$/acre) Cash Lease Rate (\$/acre) \$4.25 Crop Insurance Information Type of Coverage Yield Coverage Yield Coverage Premium Hail Exclusion (Y/N) Hail Insurance (Y/N) Weevil Cost (\$/acre) Other Crop Information Irrigation Method Gene Type Planting Pattern Purpose Practice	Herbicide Cost (\$/acre)								
Custom Application Cost (\$/acre) Scouting & Other Cost (\$/acre) Irrigation Fuel Cost (\$/acre) Irrigation Fuel Cost (\$/acre) Tillage & Harvest Fuel Cost (\$/acre) Variable Harvesting Cost (\$/acre) Variable Harvesting Cost (\$/acre) Secondary Secondar	Insecticide Cost (\$/acre)								
Scouting & Other Cost (\$/acre)	Fungicide Cost (\$/acre)								
Irrigation Fuel Cost (\$/acre)	Custom Application Cost (\$/acre)								
Tillage & Harvest Fuel Cost (\$/acre) Variable Harvesting Cost (\$/unit) Variable Harvesting Cost (\$/acre) Boll Weevil Cost (\$/acre) Labor Costs (\$/acre) Cash Lease Rate (\$/acre) Type of Coverage Yield Coverage Price Coverage Premium Hail Exclusion (Y/N) Hail Insurance (Y/N) Other Crop Information Irrigation Method Gene Type Planting Pattern Purpose Practice	Scouting & Other Cost (\$/acre)								
Variable Harvesting Cost (\$/unit) Variable Harvesting Cost (\$/acre) Boll Weevil Cost (\$/acre) Labor Costs (\$/acre) Labor Costs (\$/acre) Variable Harvesting Cost (\$/acre) Labor Costs (\$/acre) Variable Harvesting Cost (\$/acre) Cash Lease Rate (\$/acre) Variable Harvesting Cost (\$/acre) Cash Lease Rate (\$/acre) Variable Harvesting Cost (\$/acre) Crop Insurance Information Variable Harvesting Cost (\$/acre) Premium Fried Coverage Premium Pathon Coverage Path Insurance (Y/N) Variable Harvesting Path Pathon Coverage Vield Coverage Variable Harvesting Pathon Pathon Coverage Vield Coverage Variable Harvesting Pathon Pa	Irrigation Fuel Cost (\$/acre)								
Variable Harvesting Cost (\$/acre)	Tillage & Harvest Fuel Cost (\$/acre)								
Boll Weevil Cost (\$/acre)	Variable Harvesting Cost (\$/unit)								
Labor Costs (\$/acre) \$4.25 Crop Insurance Information \$4.25 Type of Coverage \$4.25 Price Coverage \$4.25 Price Coverage \$4.25 Premium \$4.25 Hail Exclusion (York) \$4.25 Hail Exclusion (York) \$4.25 Other Croprage \$4.25 Other Crop Information \$4.25 Irrigation Method \$4.25 Gene Type \$4.25 Planting Pattern \$4.25 Practice \$4.25	Variable Harvesting Cost (\$/acre)								
Cash Lease Rate (\$/acre) \$4.25 Crop Insurance Information									
Crop Insurance Information									
Type of Coverage Yield Coverage Price Coverage Premium Hail Exclusion (Y/N) Hail Insurance (Y/N) Other Crop Information Irrigation Method Gene Type Planting Pattern Purpose Practice	Cash Lease Rate (\$/acre)	\$4.2	5						
Yield Coverage Price Coverage Premium Hail Exclusion (Y/N) Hail Insurance (Y/N) Trigation Method Gene Type Planting Pattern Purpose Practice	•								
Price Coverage Premium Hail Exclusion (Y/N) Hail Insurance (Y/N) Other Crop Information Irrigation Method Gene Type Planting Pattern Purpose Practice									
Premium Hail Exclusion (Y/N) Hail Insurance (Y/N) Hail Insurance (Y/N) Other Crop Information Irrigation Method Gene Type Planting Pattern Purpose Practice	Yield Coverage								
Hail Exclusion (Y/N) Hail Insurance (Y/N) Other Crop Information Irrigation Method Gene Type Planting Pattern Purpose Practice									
Hail Insurance (Y/N) Other Crop Information Irrigation Method Gene Type Planting Pattern Purpose Practice									
Other Crop Information	Hail Exclusion (Y/N)								
Irrigation Method Gene Type Planting Pattern Purpose Practice	Hail Insurance (Y/N)								
Gene Type Planting Pattern Purpose Practice	Other Crop Information								
Planting Pattern Purpose Practice	Irrigation Method								
Planting Pattern Purpose Practice	Gene Type								
Purpose Practice Practice									
Practice									
Environmental									
	Environmental								

Notes:
Type of Coverage: CAT, APH/MPCI, CRC, IP
Irrigation Method: dry, pivot, furrow, Lepa, side roll, drip, flood, semi-irrigated
Gene Type: None, Bt, Roundup Ready, Bt + Roundup Ready
Planting Pattern: solid, skip row, ultra narrow row
Purpose: commercial, commercial/graze, graze, feed, seed, food
Practice: common, minimum till, no till
Environmental: conventional, organic

Table 1 (cont.). Crop Production Summary, Leased Land - TTAP Enterprises.

Producer:TTA	AP Enterprises	Un	it:	2
Unit Description:_	Leased Property			_

Historical & APH Yields

Historical & APH Yields	Crop: Pastu	ire	Crop:		Crop:		Crop:	
Year	Historical Yield	APH Yield						
1996		N/A						
1997								
1998								
1999								
2000								
2001								
2002								
2003								
2004								
2005								
T-Yield								

Hail Insurance Data

Insurance Data	Crop: Pasture	Crop:	Crop:	Crop:
Coverage	None			
Premium				
Frequency				
Severity				
Loss Standard Deviation				
Exclusion				

Table 2. Summary of Cow Calf Enterprise – TTAP Enterprises.

Producer:	TTAP Enterpris	ses	Unit:	<u> </u>
Unit Descrip	otion:	Home Place		

Summary of Cattle I	D ata	Expected Calf Production	
Mature Cows Jan 1	400	Calving Percentage	88
Cows Culled	59	Heifer Calves Born	176
Cows that Died	1	Heifer Calves that Died	10
Needed Replacements	60	Replacement Heifers (Jan 1)	60
Replacements Raised	60	Replacements culled	60
Replacement Heifers Bought	0	Bred Replacements	0
Mature Bulls Jan 1	16	Bred Replacements Sold	0
Bulls Culled	4	Bred Replacements that Died	0
Bulls that Died	0	Bull Calves Born	176
Needed Bull Replacements	4	Bull Calves that Died	10
Replacement Bulls Raised	0	Bull Calves Sold	0
Herd Bulls Bought	4	Bull Calves held for Replacement	0
		Replacement Bulls (Jan 1)	0
Expected Sale Weights Fo	or Cattle	Replacement Bulls Sold	0
Cull Cows	1,000	Replacement Bulls that Died	0
Cull Replacement Heifers	750		
Cull Bulls	1,500	Expected Replacement Cost	\$/head
Cull Replacement Bulls	1,000	Replacement Heifers	N/A
Weaned Heifers	450	Bull Yearlings	N/A
Weaned Steers	475	Mature Cows	N/A
		Mature Bulls	2,000

Expected Sales Price		Costs of Production	\$/head
Culled Cows	0.65	Vet, Medicine & Supplies	\$ 7.80
Culled Replacement Heifers	N/A	Marketing	\$15.00
Culled Bulls	N/A	Check-off	\$ 1.00
Culled Replacement Bulls	N/A	Salt and Mineral	\$ 8.25
Weaned Heifers	1.02	Grazing	\$44.64
Weaned Steers	1.12	Hauling	
Bred Replacement Heifers	N/A	Other	
Fed Cattle	N/A		•

Cattle Transferred to Stock	Stocker	Feedlot	
Weaned Heifers	106	X	
Weaned Steers	166	X	

Annual Supplemental Feed Requirements for Cattle				
Name of Feedstuff	Pounds/Head/Year	Price/Unit		
Range Cubes	315	\$201/ton		
Hay	360	\$45 / 1,500 lb. roll		

Table 2 (cont.). Summary of Cow Calf Enterprise – TTAP Enterprises.

Producer:	TTAP Enterprises	Unit:	_1
Unit Descript	ion: Home Place		

Historical Cattle Production

Year	Calf Sale Weight	Calf Crop %
1996	N/A	N/A
1997	N/A	N/A
1998	N/A	N/A
1999	N/A	N/A
2000	425	87
2001	440	89
2002	450	83
2003	460	82
2004	470	89
2005	462.5	88

Historical Prices Received for Cattle

Year	Steer Price	Heifer Price	Cow Price	Bull Price
1996	N/A	N/A	N/A	N/A
1997	N/A	N/A	N/A	N/A
1998	N/A	N/A	N/A	N/A
1999	N/A	N/A	N/A	N/A
2000	\$0.87	\$0.79	\$0.46	\$0.56
2001	\$0.88	\$0.81	\$0.47	\$0.58
2002	\$0.93	\$0.86	\$0.49	\$0.60
2003	\$0.98	\$0.92	\$0.52	\$0.61
2004	\$1.02	\$0.95	\$0.58	\$0.69
2005	\$1.12	\$1.02	\$0.65	\$0.75

Table 3. Summary of Stocker Enterprise, Retained – TTAP Enterprises.

Producer :TTAl	P Enterprises	Unit #: _	<u> </u>
Unit Description:	Retained Stockers		

Stocker Herd Information				
	Current Year	Years 2-10		
Stockers on hand Jan 1.	272	272		
Average weight per head of stockers Jan 1.	550	550		
Crop Stockers are tied too.	Graze Wheat	Graze Wheat		
Stocker Lease Terms (Select ONE)				
\$/lb of gain	N/A	N/A		
\$/cwt on weight				
\$/acre				
\$/head				
Group 1. (purchased and sold in different year)				
Stocker Purchase date	N/A	N/A		
Sale Date	May 3	May 3		
On weight after shrink for Fall Stockers	463	463		
Death loss	0	0		
Number Purchased	0	0		
Purchase Price	N/A	N/A		
Sale Price	1.04 H : 1.09 S			
Daily gain	1.93			
Decision date to final sale	N/A	N/A		
#transferred in	272	272		
#transferred out	0	0		
Acres Grazed	500	500		
Answer Next two only if using graze out rule				
Normal Pull-off date	N/A	N/A		
Net Revenue difference to Pull-off cattle	N/A	N/A		

Stocker Cattle Costs of Production (\$/head)		
Vet, Medicine & Supplies	22.37	
Marketing/Commission	0	
Utilities	0	
Salt and Mineral	0	
Custom Services	0	
Hauling, Fuel, Lube Cost	0	
Labor	0	

Table 3 (cont.). Summary of Stocker Enterprise, Retained – TTAP Enterprises.

Producer:	TTAP Enterprises	Unit #:	1
Unit Descriptio	on: Retained Stockers		

Annual Feed Requirements for Stockers			
Feed	Feed/Head/Day	Price/Unit	
None			

Historical Gain - Stocker Calf Production			
Year	In-weight	Out-weight	Number of Days
2004	495	795	181
2003	501	801	178
2002	505	803	180
2001	510	814	185
2000	486	788	177
1999	484	791	175
1998	493	796	182
1997	497	799	186
1996	482	810	193
1995	499	808	188

Optional Pricing Histories				
Year	Stocker Purchase Price (\$/lb)	Stocker Sale Price (\$/lb)	Contract Rates (\$/lb of gain or \$/head/month)	
2004	N/A	1.03		
2003		0.99		
2002		0.97		
2001		0.95		
2000		0.93		
1999		0.91		
1998		0.89		
1997		0.87		
1996		0.85		
1995		0.83		

Table 3. Summary of Stocker Enterprise, Purchased – TTAP Enterprises.

Producer:	TTAP Ent	erprises	Unit #: _	2	<u>!</u>
Unit Descripti	ion·	Purchased Stockers			

Stocker Herd Information				
	Current Year	Years 2-10		
Stockers on hand Jan 1.	100	100		
Average weight per head of stockers Jan 1.	575	575		
Crop Stockers are tied too.	Graze Wheat	Graze Wheat		
Stocker Lease Terms (Select ONE)				
\$/lb of gain	N/A	N/A		
\$/cwt on weight				
\$/acre				
\$/head				
Group 1. (purchased and sold in different year)				
Stocker Purchase date	Dec 5	Dec 5		
Sale Date	May 3	May 3		
On weight after shrink for Fall Stockers	450	450		
Death loss	0	0		
Number Purchased	100	100		
Purchase Price	1.25			
Sale Price	1.12			
Daily gain	1.67			
Decision date to final sale	N/A	N/A		
#transferred in	0	0		
#transferred out	0	0		
Acres Grazed	500	500		
Answer Next two only if using graze out rule				
Normal Pull-off date	N/A	N/A		
Net Revenue difference to Pull-off cattle	N/A	N/A		

Stocker Cattle Costs of Production (\$/head)		
Vet, Medicine & Supplies	34.50	
Marketing/Commission	0	
Utilities	0	
Salt and Mineral	0	
Custom Services	0	
Hauling, Fuel, Lube Cost	0	
Labor	0	

Table 3 (cont.). Summary of Stocker Enterprise, Purchased – TTAP Enterprises.

Producer:TTA	AP Enterprises	Unit #:	<u>2</u>	
Unit Description:	Purchased Stockers			

Annual Feed Requirements for Stockers			
Feed	Feed/Head/Day	Price/Unit	
None			

Historical Gain - Stocker Calf Production			
Year	In-weight	Out-weight	Number of Days
2004	445	753	184
2003	462	748	172
2002	438	762	186
2001	449	755	180
2000	471	739	171
1999	475	744	178
1998	443	751	184
1997	447	748	186
1996	432	768	196
1995	450	750	189

Optional Pricing Histories			
Year	Stocker Purchase Price (\$/lb)	Stocker Sale Price (\$/lb)	Contract Rates (\$/lb of gain or \$/head/month)
2004	1.18	1.09	N/A
2003	1.12	1.01	
2002	1.02	0.91	
2001	1.00	0.89	
2000	0.98	0.87	
1999	0.96	0.85	
1998	0.94	0.83	
1997	0.92	0.81	
1996	0.89	0.78	
1995	0.86	0.75	

 Table 4. Production Calendar for January through June for TTAP Enterprises.

	Jan	Feb	Mar	Apr	May	Jun
Activity/ Personnel	Vaccinate Stockers/T. Rancher, Jr., J. Rancher, & C. Maverick	Spray wheat/T. Rancher, Jr. & C. Maverick	Report Acreage to FSA/T. Rancher, Jr.	1) Spray Wheat/T. Rancher, Jr. & C. Maverick 2) Equipment Repair (harvest)/C. Maverick	1) Sell Stockers/ T. Rancher, Jr. & C. Maverick 2) Custom wheat harvest/ T. Rancher, Jr. & C. Maverick 3) Plant Sorghum/T. Rancher, Jr. & C. Maverick	1) Sell cull bulls/T. Rancher, Jr. 2) Buy Replacement Bulls/ T. Rancher, Jr. 3) Harvest & Sell Wheat/T. Rancher, Jr. & C. Maverick 4) Make land and lease payments/ T. Rancher, Jr. and J. Rancher
Enterprise/ Input /Rate	Stockers/Triange9/ 5cc per head	Wheat/KernelMax/3 oz per gallon	All Acreage	1) Wheat/ KernelMax/3oz per gallon 2) Wheat	 Stockers Wheat Sorghum/Grow All Seed/ 60lbs per acre 	1) Cow-calf 2) Cow-calf 3) Wheat 4) All

 $Table\ 4\ (cont.).\ Production\ Calendar\ for\ July\ through\ December\ for\ TTAP\ Enterprises.$

	Jul	Aug		Sept		Oct	Nov		Dec
Activity/ Personnel	Herbicide application for brush control/C. Maverick	Renew insurance policies/J. Rancher	2)	Custom harvest Sorghum/T. Rancher, Jr. & C. Maverick Plant Wheat/T. Rancher, Jr. & C. Maverick	2)	Palpate cows/T. Rancher, Jr., & C. Maverick Vaccinate Raised Stockers/T. Rancher, Jr., J. Rancher & C. Maverick	Sell Cull Cows/T. Rancher, Jr. & C. Maverick	1) 2)	Purchase stockers/T. Rancher, Jr. Vaccinate purchased stockers/T. Rancher, Jr., J. Rancher & C. Maverick
Enterprise/ Input /Rate	Cow-calf	All	1) 2)	Sorghum Wheat/Grow Great Wheat Seed/60 lbs per acre	1) 2)	Cow-calf Raised Stockers/ Triangle9/5 cc per head	Cow-calf	1) 2)	Purchased Stockers Purchased Stockers/ Triangle9/5 cc per head

Table 5. Cash Flow Timing – TTAP Enterprises.

	J	F	M	A	M	J	J	A	S	0	N	D	Total
% of Revenue	0	0	0	0	67	15	0	0	7	3	8	0	100%
% of Expenses	3	5	2	5	5	39	4	13	3	16	2	3	100%