

Hog Marketing Alternatives Selling Packer Grade and Yield vs. Selling Locally

Douglas G. Landblom and James L. Nelson

What is your best hog marketing alternative? Hogmen attending the 1976 Southwest Area Pork Producers annual meeting were encouraged by a Hormel and Company representative to consider selling on a grade and yield basis as one of their marketing alternatives.

Since the job of raising pork isn't finished until marketing has been completed, a study was initiated in 1976 and completed in 1977 at the Dickinson Experiment Station to evaluate the economics of selling market hogs at a local buying station, compared to selling on a grade-and-yield basis from the Dickinson, North Dakota, area. In this economic study, above average quality crossbred York X Hamp and straightbred Yorkshire market barrows raised at the Dickinson Station were randomly assigned to be marketed at either the Hormel and Company plant, Mitchell, South Dakota, or Western Livestock Company, Dickinson, North Dakota.

Three separate comparative marketings were made for each selling method. The hogs selected for slaughter at Mitchell, 450 miles from Dickinson, were weighed and shipped directly via a commercial livestock hauling firm. Storm-related problems were encountered during one of the two winter marketings. Those hogs that were marketed on March 12, 1976 had originally been scheduled for shipment one week earlier. However, a severe winter storm interrupted normal livestock movements and arrangements had to be made for a later shipping date. As a result, several of the hogs became heavier than desirable.

The hogs marketed locally were to be hauled directly to the Western buying station according to the project's original design. However, no measurable shrinkage was recorded after the first group of hogs were sold locally, since the Dickinson Station is located within two miles of Western. Thus, the original design was modified and in an effort to typify a regular farm marketing, the second group of hogs sold locally were weighed and transported 30 miles before being delivered to the buying station.

Compared to no measurable weight loss in the first group (Table 1), an average live weight loss of 4.7 pounds per head occurred in the second group sold locally, which amounted to an average shrinkage of 2 per cent. The third group assigned to be sold locally were marketed but not actually sold, since most of them were kept for replacement purposes.

Origin, destination weight and shrinkage, as well

Landblom is assistant animal husbandman and Nelson is animal husbandman, Dickinson Branch Experiment Station.

as the market value per hundred weight, have been summarized for both marketing types in Table 1.

Discussion

Selling grade-and-yield carcasses differs substantially from selling live hogs at a local buying station. Buying stations purchase hogs in groups, sort out the obvious individuals that are either light or heavy and pay a lower price. In grade and yield marketing, however, each pig is sold on an individual basis. Those that are either under- or over-finished are bought on a calculated meat price that is determined by dividing the liveweight market value per hundred weight by a standard yield factor that is predetermined by the packer. Hormel's standard yield factor was derived from the actual yields taken from a large number of hogs that were slaughtered in each liveweight category.

In Table 2, the meat price has been calculated using the standard yield conversion factor for those hogs shipped to Mitchell. Also in Table 2, it can be seen that improper sorting of hogs to be sold on a grade-and-yield basis can result in a substantial loss. This is not to say that sorting losses can be eliminated completely. However, they can be reduced considerably, especially when a scale is employed.

Grade-and-yield premiums are paid for those carcasses which possess above average quality. Carcass quality is graded on a scale from 1 to 4, and those carcasses that are considered to be of high enough quality to be given a number 1 or 2 grade are paid a premium per hundred pounds of carcass according to the schedule shown in Table 3. Any carcass graded as number three in quality is said to be standard and no premium is paid. Quality grade number 4 is reserved for over-finished hogs and a dockage of \$2.00 per hundred weight is levied. Each of the three grade-and-yield marketings have been summarized in Table 4.

Compared to Hormel's standard yield, pigs sold from the Dickinson Station were above average in quality and also yielded 2.5 per cent, 1.9 per cent and 1.7 per cent higher in groups I, II and III, respectively. In all cases the gross return per hundredweight was higher for hogs marketed grade-and-yield; however, net return was less in two of the three shipments after trucking and shrinkage expenses were deducted.

When compared on an equal weight basis of 220 pounds (Table 5), a slight net return of \$.85 per head was received for the first group marketed grade-and-yield. The net return for groups 2 and 3 favored local marketing and amounted to \$.61 and \$1.41 more per head, respectively. Average shipping cost from the Dickinson area amounted to \$3.04 per head. Shrinkage expense above that encountered with local selling amounted to an average \$1.21 per head.

Summary

Results of this trial, after three marketings, indicate that there is no advantage for selling on a grade-and-yield basis from the Dickinson area. Grade-and-yield premiums contributed to a higher gross return than that received from local selling, but on the average the premiums were not enough higher to substantially offset the high cost of trucking and liveweight shrinkage. Although no economic advantage was obtained by selling grade-and-yield from the Dickinson area, producers situated within a reasonable hauling distance of 130-175 miles may want to consider selling grade-and-yield if they are able to sort and market 30-40 butcher

hogs at a time that are above average in quality and will weigh within the desirable weight range of 200-230 pounds on arrival at the packer.

For those producers situated within a reasonable hauling distance and considering grade-and-yield marketing, the following guidelines should be adhered to: market price information should be obtained from the packer and the local buyer prior to shipment to determine which marketing method has the potential to yield the most return. In an attempt to avoid sorting losses when selling grade-and-yield, it is essential that each hog be weighed before shipment, and those that are too heavy should be sold locally, and those hogs that are lighter than desirable, should be continued on feed.

Winter weather should be watched closely when hogs are approaching optimum market weight because severe winter storms can interfere with normal transportation movement, and hogs can easily become heavier than 200-230 pounds. When small or part semi-loads are being shipped commercially, trucking arrangements should be made in advance to allow the trucker ample time to arrange for livestock to fill out the remainder of his load.

Table 1. Weight summary and market value of pigs sold grade and yield vs. local marketing.

	Grade and Yield			Local marketing		
	Mar 12	Oct 1	Jan 7	Mar 12	Oct 1	Jan 7
Date marketed						
No. head	36	28	29	19	7	24
Base market value/cwt, \$	45.00	33.24	37.36	43.75	33.75	37.25
Dickinson wt., lbs.	8729	6247	7075	4459	1653	5161
Avg. wt./pig, lbs.	242.5	223.1	243.9	234.7	236.1	215
Destination wt., lbs.	8555	6025	6770	4459	1620	¹
Shrink, lbs.	174	222	305	—	33	—
Shring/pig, lbs.	4.9	7.9	10.5	—	4.7	—
Per cent shrink	2.02	3.5	4.3	—	2.0	—

¹Pigs in this group were not actually marketed locally since they were retained for replacement purposes.

Table 2. Live market price, standard yield + meat price/cwt of carcass sold grade + yield

Live wt.	Live market price			÷	Standard yield conv. factor	=	Extended meat price \$/cwt.		
	Mar 12 1976	Oct 1 1976	Jan 7 1977				Mar 12 1976	Oct 1 1976	Jan 7 1977
170-180	43.50	31.75	35.50		.704		61.79	45.10	50.43
181-190	43.50	32.00	36.50		.709		61.35	45.13	51.48
191-200	44.50	33.00	37.50		.713		62.40	46.28	52.59
201-230	45.00	33.50	38.00		.720		62.50	46.52	52.77
231-240	44.75	33.25	37.75		.725		61.72	45.86	52.06
241-250	44.25	33.00	37.25		.727		60.86	45.39	51.23
251-260	43.75	32.50	36.75		.729		60.01	44.58	50.41
261-270	43.25	32.00	36.25		.730		59.24	43.83	49.67
271-280	42.25	31.00	35.25		.732		57.71	42.35	48.16
281-290	41.25	30.00	34.25		.733		56.27	40.92	46.73

Table 3. Weight categories and premiums paid for number 1 and 2 hogs.

Live wt. range	Carcass wt. range	Premium \$/carcass cwt.	
		Mar 12 and Oct 1	Jan 7
No. 1 grade			
180-240	128-176	+\$1.75/cwt	+\$2.00/cwt
240-270	177-199	+\$1.25/cwt	+\$1.50/cwt
270-330	200-245	+\$1.00/cwt	+\$1.25/cwt
No. 2 grade:			
180-240	128-176	+\$1.00/cwt	+\$1.25/cwt
240-270	177-199	+\$0.75/cwt	+\$1.00/cwt
270-330	200-245	+\$0.50/cwt	+\$0.75/cwt

Table 4. Grade and yield summary.

Group I, marketed March 12th, 36 head.		Market value excluding grade + yield	\$33.24/cwt
Actual yield 6417 ÷ 8555=	75.0%	Market value increase for yield	+\$ 0.87/cwt
Hormel's average standard yield=	72.5%	Market value increase for grade	+\$ 1.00/cwt
Yield increase	2.5%		<u>\$35.11/cwt</u>
Market value excluding grade + yield	\$45.00/cwt	Local market value	\$33.75/cwt
Market value increase for yield	+\$ 0.41/cwt	Group III, marketed January 7, 1977, 29 head.	
Market value increase for grade	+\$ 0.73/cwt	Actual yield	73.8%
	<u>\$46.14/cwt</u>	Hormel's average standard yield	72.1%
Local market value	\$43.75/cwt	Yield increase	1.7%
Group II, marketed October 1, 1976, 28 head.		Market value excluding grade + yield	\$37.36/cwt
Actual yield 4456 ÷ 6025=	73.96%	Market value increase for yield	+\$ 0.70/cwt
Hormel's average standard yield=	72.08%	Market value increase for grade	+\$ 0.76/cwt
Yield increase	+ 1.88%		<u>\$38.82/cwt</u>
		Local market value	\$37.25/cwt

Table 5. Comparison of grade and yield marketing vs. local marketing based on equal weight.

Marketing group	Grade and yield			Local selling		
	I	II	III	I	II	III
Date	Mar 12	Oct 1	Jan 7	Mar 12	Oct 1	Jan 7
Live wt. value/cwt, \$	46.14	35.11	38.82	43.75	33.75	37.25
Gross return, 220 lb. hog, \$	101.51	77.24	85.40	96.25	74.25	81.95
Expenses: trucking, \$	-2.77	-3.03	-3.33	-0.50	-0.50	-0.50
shrinkage, \$	-2.14	-2.66	-3.67	-	-1.59	-1.64
Net return/head, \$	96.60	71.55	78.40	95.75	72.16	79.81
Difference, \$	+0.85				+0.61	+1.41