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Adjusting Farm Production Through a Grass and Livestock Program

A New Look at Agricultural Programs

By J. Carroll Bottum and John O. Dunbar

Since it appears that we are going to have some kind of farm program, we are presenting a proposal for adjusting production with demand through grass and livestock.

Scientists say that we could feed over twice as many people in this country if we were willing to change to a diet consisting largely of vegetables and grains, properly fortified. They also say that we would fall far short of feeding our present population if we were to depend completely on a grazing-animal agriculture. Studies show that the output of meat—measured in calories—from beef cattle on grass is only about one-fourth what corn and hogs would produce on the same acreage.

Therefore, why not balance agricultural production with demand—at acceptable prices to farmers and consumers—by making adjustments in the amount and type of livestock we produce? When surpluses accumulate, we could shift to more grazing animals. This would mean more beef to eat and milk to drink, which is in line with good nutrition and would upgrade diets.

Most analyses indicate that if we increase the total supply of food 1 percent, the price will decline more than this amount; some studies show up to 4 percent decline. Therefore, it would seem reasonable to believe that a 5 percent increase in supplies would decrease prices as much as 10 percent. Consequently, when the supply of farm products exceeds normal requirements, farmers are severely penalized in the market by the extra supply of food. A reduction in the total output of food by shifting to more roughage-consuming livestock and livestock products can help bring farm prices to a more normal relationship with prices of other commodities and services in the economy.

Under the program we propose, the consumer would make his choice in the market, where prices would be permitted to seek their own level. The farmer, except for a “grass adjustment” payment, would get his price in the market place. No controls, allotments, or quotas would be required on the individual farm. It would make it easier for farmers to increase soil conservation. It creates an “ever-normal granary” in the form of soil fertility and live animals.

This program would operate only in periods when farm incomes are below a predetermined level. It would be built around large enough payments for grass, legumes, and fallow to get farmers to put more than their normal acreage to these uses. This would reduce acres in grain and prevent surpluses. Additional beef and milk production from more grass would cause prices of these products to rise less or fall more than other products. Therefore, payments would be made for land already in grass—as well as land shifted to grass and fallow—as a means of compensating beef and dairy producers for this price disadvantage.

In the absence of any farm program, this is the adjustment which would tend to take place. But the low prices of farm products that would precede such an adjustment would be exceedingly painful to farmers. Governmental action can be taken to speed up this adjustment and to protect farm income by payments for grass and fallow.

Under this program “grass adjustment” payments would be made for 30 percent of the carrying capacity of the nation’s 565 million acres of farm land in permanent pasture and hay. Payments would also be made on 30 percent of the carrying capacity of the 150 million acres of rotation pasture, hay, and fallow. The estimated 45 million acres of rotation land which needs to be shifted from grain to pasture, hay, and fallow would receive 100 percent payment for its carrying capacity.

The carrying capacity of this acreage, based on an average of 22 acres of permanent grass per cow and 3 acres of rotation pasture per cow, would be 36 million cow units. (This includes an allowance for government land leased for grazing.) Now assume that Congress appropriates 750 million dollars for this program. Divide this by 36 million and the result is a payment of \$21 for each cow unit.

To arrive at the payment per acre this cow-unit payment is divided by the acres required to carry a cow one year, and the result is then multiplied by the percent of carrying capacity which is allowed for the kind of grass in question. Thus, payment for an acre of permanent grass is found by dividing \$21 by 22 (carrying capacity), which equals 95 cents. Multiplying this by 30 percent (carrying capacity for which payment is made on permanent grass), we get about 30 cents. Payment for an acre shifted from grain to rotation hay or pasture is found by dividing \$21 by 3 (carrying capacity), which gives \$7.00. An acre already in rotation hay or pasture gets only 30 percent, or \$2.10.

These are average payments. Actual payments for each farm would be determined by cow-carrying capacity of the land in that part of the

country. If Congress appropriated more or less than 750 million dollars, payments would be adjusted accordingly.

Payments for different types of farms can be explained by referring to the following tables. To figure payment for a cattle ranch entirely in permanent grass, determine the average cow-unit carrying capacity for your region. Next multiply by 30 percent to get the cow units on which payment will be made. Then multiply by the average national payment of \$21 per cow unit.

Payment for permanent grass on a dairy or hog farm is determined in the same manner. If the proportion of your acreage in rotation hay and pasture is equal to the average for the land use area in which your farm is located, you get a payment of 30 percent of carrying capacity figured at \$21 per cow unit. All rotation hay and pasture acreage above the average for your land use area gets a payment at the rate of 100 percent of the cow-unit carrying capacity.

Your farm would have to have at least 70 percent as much of its rotation land in pasture and hay as the average for your land use area before you could start receiving payment. By increasing acreage up to the average, you would get the 30 percent payment. For each acre above the average you would receive 100 percent payment.

ESTIMATED PAYMENT FOR 2,000-ACRE CATTLE RANCH
(All in permanent grass)

Average carrying capacity of ranch	100 cows
Payment (30% of 100 cow units x \$21)	\$630.00

ESTIMATED PAYMENT FOR A 200-ACRE DAIRY FARM

Land Use	Acreages After Adjustment	Units Carrying Capacity
Buildings and lots	10	None
Permanent pasture and hay	70	8
Rotation pasture and hay	60	20
Increased rotation pasture and hay	18	6
Harvested grain crops	42	None
 Basis of Payment		 Payments
Permanent pasture (30% x 8 x \$21)		\$ 50.40
Rotation pasture (30% x 20 x \$21)		126.00
Increased rotation grass (100% x 6 x \$21)		126.00
Total payment		\$302.40

ESTIMATED PAYMENT FOR A 200-ACRE CENTRAL-WEST HOG FARM

Land Use	Acreages After Adjustment	Units Carrying Capacity
Building and lots	10	None
Permanent pasture and hay	30	5
Rotation pasture and hay	40	17
Increased rotation pasture and hay	12	5
Harvested grain crops	108	None
 Basis of Payment		Payments
Permanent grass (30% x 5 x \$21)		\$ 31.50
Rotation grass (30% x 17 x \$21)		107.10
Increased rotation grass (100% x 5 x \$21)		105.00
Total payment		\$243.60

It should be remembered that this is an aggregate approach to the solution of the farm price and income problem. It would adjust the total supply of food to the demand and thereby raise total farm income. It would allow for free adjustment of production and prices between the various individual commodities. It could be operated in conjunction with the present farm program to solve the diverted acres problem.

Payments distributed as set forth in this program would bring about adjustments based upon the economic value of grass in relation to other crops. The greatest adjustment would take place in the high-cost, marginal crop areas. If it were desirable to make the adjustments and distribute payments more to the intensive, low-cost crop areas, the payments among the states could be made according to the relative total value of the farm production in each state. This would give relatively greater payment to the more intensive farming areas and bring larger adjustments there. The amount of the appropriation and its distribution between the acreage currently in grass and acres shifted to grass may be varied according to circumstances and experience with the program.