

Range Problems of Marginal Farm Lands

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THE scope of this discussion is limited to the northern great plains. This region includes the east half of Montana; the parts of North and South Dakota west of the 98th Meridian; northeast Wyoming; and northwest Nebraska. The principles however, will apply to other regions.

This is the region of the mixed prairie type of range grassland. Important to the discussion of my subject is the fact that in this region, soils and climate are generally favorable for the regeneration of a grass cover on plowed farm lands. Probably nature favors the northern plains region in this respect more than any other major range region of the west.

In area, the northern plains region comprises some 140 million acres of land. Approximately 25 million acres of the region now are in dryland grain farming use. Ten years ago, that figure stood at about 19 million acres. Besides the present dry-farming acreage, an estimated twelve to fifteen million acres of the land of this region has at some time been plowed for farm crop uses. Some six million acres of this once-plowed land, abandoned for crop farming, have been reseeded for range use. Probably a considerable part of this reseeded land has been replowed and now figures in the expansion of the dry-land grain farming acreage of the past decade. In addition to the present dry-land grain farming acreage of this region, I estimate that five to seven million acres of land are dry-farmed for the production of livestock feed and forage crops.

We see, then, that approximately a third of the land area of the region has at one time been plowed. What, where, and

why are the marginal farm lands, in this crop land use picture of the region?

OCCASIONAL ACRES

It is my belief that sixty percent of the lands of the region now in dry-land grain farming will, over a period of time, yield ninety percent of the grain crop. This is based on a study of the wheat yield characteristics of all of the Montana farms in the U. S. D. A. agricultural conservation program from 1928 to 1946. Though the other forty percent of the dry-farm wheat acreage of these farms did in the occasional favorable year yield a good wheat crop, in most of the years they failed to produce a crop. The analysts who made the yield study to which I refer had a name for these acres of the forty percent. They called these acres "The occasional acres".

There have been some important new developments in western dry-farm technology in the past decade, and these may have some influence upon the margin for dry-farm crop uses of land. The favorable effects of these developments apply best to the better lands, however—to those of the lands with the better soil and moisture conditions. Of the twenty five million acres of land now in dry-farm grain production in the northern plains, the best fifteen million acres of it likely will, over a period of time, yield ninety percent of the wheat. The other ten million acres may yield a good crop in the year of good moisture and temperature conditions, but through the years these ten million acres will produce only ten percent of the total wheat crop.

These ten million acres are the mar-

ginal farm lands of the northern plains region. They are now in dry-land wheat farming use mainly because of the past decade of generally favorable weather conditions, of our artificially maintained agricultural prices since the war, and of the past subsidies of our agricultural "conservation" programs. These marginal farm lands of the northern plains have limited soil fertility, wind erosion hazards, and insufficient precipitation. We find these lands not only in those areas that are marginal in their entirety; we find them on the fringes of the areas that do have good dry-farm crop land resources.

These "marginal farm lands" are not farm lands—they are range lands. We should recognize and use them for such. We hear discussion of a policy for these lands that sounds wise and good, but it doesn't fit. That policy is one of using these lands in grain production during the favorable years and returning them to grass when their grain production isn't needed. Such a policy assumes that the marginal lands can easily be reseeded to range grasses when the good weather runs out. That isn't realistic. If we must have a program-stimulated western dry-land wheat production, we can get more wheat for less cost by applying the subsidy to the better grades of the dry-farm crop land. Beyond the financial cost of the subsidy, there is a large and real social cost in maintaining agricultural settlement and agricultural crop land uses on the marginal farm lands.

Our public measures in agriculture have done much to keep people on these marginal lands. The most consistent "crop" of those lands has been their subsidies. Once such a subsidy is put on the land, there always is local resistance to any removal of the subsidy. That entails a shrink in the local population, town business, and public revenues. The cost of shaking marginal farm lands out of such

uses always is locally severe. One might even argue that if we *must* have that ten percent of the wheat from the "occasional acres" we had best get it through the speculative "suitcase" type of wheat farming rather than through family farm occupancy and farming use of these lands.

Our agricultural policy for these lands should be that of getting them entirely and permanently out of crop farming uses. They cannot practically be shifted between crop farming and range uses. Farming their soils lowers their naturally limited nitrogen reserves and deteriorates the soil structure so that reseeding with range grasses is problematic even in the favorable years.

Successful opportunity for a grass-wheat long-time rotation lies with the better grades of the dry-farm lands of the northern plains, rather than with the "occasional acres". In time such a rotation plan will have to come, if we are to maintain even the best of the dry-farm lands of the northern plains in crop agriculture. Such a rotation would have to be a fairly long one, for soil nitrogen restoration in an arid climate. It is difficult to envision the economic change that any extensive use of such a rotation would entail, in the northern plains. We have yet to face the "facts of life" in that, for it would mean much less wheat acreage and much more of a livestock agriculture, for the western dry-land farm.

Some such rotation is feasible and an increasing amount of it is now being done, as the agricultural statistics of the northern plains clearly indicate. But, it is feasible for the better of the dry-farm crop lands, not for the "occasional acres". Those lands belong in permanent range-land use.

What are some features of our agricultural policies and programs that can aid in keeping these occasional acres in range?

In my view, our first and most important step is to "tag" these lands—to locate, map and classify them and to show how and why they are marginal, for crop farming uses. Then, the programs should be pointed at getting and *keeping* these lands in range. If the programs cannot attain that result, for the privately-owned lands, then public rural zoning measures to regulate private land uses, or acquisition into public ownership, may be the only answer for averting the eventual loss of the resource.

We can have programs and programs for conservation and good resource use, but while we have the lure of high wheat prices, the programs won't be very effective. If we must have the unusually high wheat prices to stimulate the production needed in international affairs, then it is doubtful whether any programs can hold the line against the farming of the "occasional acres". We have seen the struggle of some of the U.S.D.A. program administrators to keep the "L.U." sub-marginal purchase lands from being sold, at the behest of local pressures from those who would use them to try for the "fast buck".

Local taxation and tax policy are important in keeping marginal farm lands out of farm use and in rangeland. Where

these lands are classed as range, their taxes will run five cents to fifteen cents an acre. But when they are classed as farm land, the tax jumps to five or ten times the amount of the rangeland tax. Such a change becomes a definite and important force against the good use of these lands. It forces them into crop agriculture uses, and prevents the return of the "occasional acres" to rangeland use. The cause of good land use is served best where the suitable uses of the land are clearly recognized and carefully classified.

In summary, we now have an unwarranted optimism among many agricultural people concerning the possibilities for shifting the marginal farm lands of the northern plains between crop farming and rangeland uses. But, these lands will not add appreciably to our total wheat supply in dry-farm crop uses, and they give us high social costs in family farm settlement. From both the human welfare and the resource welfare standpoints, we should try to keep these lands out of crop agriculture uses.

The marginal farm lands of the northern great plains region or of any other region will, eventually, support more people and add more to the agricultural product value in their use as rangelands