The problem of the unsuccessful dry farm in the northern Great Plains
by Harold G Halcrow

A THESIS Submitted to the Graduate Committee in partial fulfillment of the requirements for the degree of Master of Science in Agricultural Economics
Montana State University

Abstract:
A large percentage of the dry farms in the Northern Great Plains are not returning an income to the operators which will enable them and their families to maintain a reasonable standard of living. This study endeavors to discover, verify and analyze some of the causes and remedies for this situation. It is found that these farmers are unsuccessful because they have failed to sufficiently adapt their farm organizations to the natural conditions which exist in this area. This failure may be due to a variety of factors but in general a lack of economic and biological knowledge has been complemented by a lack of skill in the application of this knowledge to the vicissitudes of nature.

Although various reasons have caused farm failure, it is found that many characteristics are peculiarly associated with these more unsuccessful farmers of this area. Their farms are small and of low quality. Over two—thirds of them are below 560 acres in size and the grade or quality of lend is not above average. Crops and livestock are raised on a small scale and farm practices are not the best. These farmers are handicapped by poor buildings, unreliable water supplies, low power, and poor machinery. Sociological analysis shows that these people tend to be in the older age groups and in rather poor health. Birth rates are low; the average number of persons per family 5.75, but obese people are not greatly handicapped by lack of schooling. A large majority of the people settled here between 1908 and 1918 and have been farming since then. At the present time most of the unsuccessful farm operator: are heavily in debt and have liwtle equity in farm property, but there is a wide range in individual situations. Furthermore, most of thete people a u being supported by governmental funds; in 1956, nearly three-fourths of their average total money income was supplied by the Federal Government.

A state of unsuccessful socialism is perpetuated by the benificence of the Federal Government, but the situation should and probably can be improved by farm changes. Reorganization based on the physical and economic characteristics of the lend means that these farms should be made larger or else elimim ted and in many cases the type of farming should be changed.

This involves the readjustment of people to new farm organizations and in some cases to new homes. But these social, economic, and financial problems which perplex these people have a bearing on the rest of the- social organization and it behooves society to recognize these problems and to offer aid in their solution.

THE PROBLEM OF THE UNSUCCESSFUL DRY FARM IN THE NORTHERN GREAT PLAINS

by

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FOREWARD

In the words of Aldo Leapold, "Civilization is not . . . the enslavement of a stable and constant earth. It is a state of mutual interdependent cooperation between human animals, other animals, plants, and the soils, which may be disrupted at any moment by the failure of any one of them. Land despoliation has evicted nations and can on occasion do it again.... It thus becomes a matter of some importance, at least to ourselves, that our dominion, once gained, be self-perpetuating rather than self-destructive."

THE PROBLEM OF THE UNSUCCESSFUL DRY FARM IN THE NORTHERN GREAT PLAINS

ABSTRACT

A large percentage of the dry farms in the Northern Great Plains are not returning an income to the operators which will enable them and their families to maintain a reasonable standard of living. This study endeavors to discover, verify and analyze some of the causes and remedies for this situation. It is found that these farmers are unsuccessful because they have failed to sufficiently adapt their farm organizations to the natural conditions which exist in this area. This failure may be due to a variety of factors but in general a lack of economic and biological knowledge has been complemented by a lack of skill in the application of this knowledge to the vicissitudes of nature.

Although various reasons have caused farm failure, it is found that many characteristics are peculiarly associated with these more unsuccessful farmers of this area. Their farms are small and of low quality. Over two-thirds of them are below 360 acres in size and the grade or quality of land is not above average. Crops and livestock are raised on a small scale and farm practices are not the best. These farmers are handicapped by poor buildings, unreliable water supplies, low power, and poor machinery. Sociological analysis shows that these people tend to be in the older age groups and in rather poor health. Birth rates are low; the average number of persons per family 3.75, but these people are not greatly handicapped by lack of schooling. A large majority of the people settled here between 1908 and 1918 and have been farming since then. At the present time most of the unsuccessful farm operators are heavily in debt and have little equity in farm property, but there is a wide range in individual situations. Furthermore, most of these people are being supported by governmental funds; in 1936, nearly three-fourths of their average total money income was supplied by the Federal Government.

A state of unsuccessful socialism is perpetuated by the benificence of the Federal Government, but the situation should and probably can be improved by farm changes. Reorganization based on the physical and economic characteristics of the land means that these farms should be made larger or else eliminated and in many cases the type of farming should be changed. This involves the readjustment of people to new farm organizations and in some cases to new homes. But these social, economic, and financial problems which perplex these people have a bearing on the rest of the social organization and it behooves society to recognize these problems and to offer aid in their solution.

PART I. INTRODUCTION

The Area

The northern Great Plains region, as considered in this study, includes the contiguous parts of five states, (figure 1). The area includes that part of Montana which lies east of the Rocky Mountains, the northeastern quarter of Wyoming, the northwestern corner of Nebraska and that part of the Dakotas which lies west of the ninety-eighth meridian except for the small locality in north central North Dakota. The area contains approximately 178,000,000 acres of land. It is estimated that about 22,000,000 acres of this land are or have been under cultivation in recent times. 1/

There is a wide variation in the soils of this region. However, these soils are generally low in humus. Pedologically speaking, they are youthful in that they have not developed well defined profiles. They are generally immature, non-glaciated, and relatively unleached soils. 2/ The surface of this Great Plains region, where uneroded, is level or gently sloping. But a great part of the land has been eroded sufficiently to produce an undulating or rolling topography and some areas have been eroded to the extent of "bad land" topography. Broad flat streams, with their source in the Rocky Mountains follow a generally easterly course across these plains. The main stream of this area is the Missouri. It is fed by smaller sluggish, and sometimes

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1/ Wilson, M. L., Wilcox, R. H., Klemmedson, O. S., and Parr, V. V., "A Study of Ranch Organization and Methods of Range Cattle Production in the Northern Great Plains Region." U.S. Dept. of Agriculture in cooperation with the Agr. Exp. Stations of Montana, North Dakota, South Dakota, and Wyoming. Technical Bulletin 45, March, 1928, pp. 3, 4, and 5.

2/ Lapman, Macy H., "Soils of the Great Plains Region," U.S. Dept. of Agriculture, Bureau of Soils, Bulletin 96, 1913, pp. 381-464.