CONTENTS

THE CALIFORNIA STATE LAND SETTLEMENTS AT DURHAM AND DELHI

ROY J. SMITH
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INTRODUCTION

The objectives of this study have been to discover and analyze the problems that were encountered in the California State Land Settlements at Durham and Delhi. The study has been made because of current settlement activity by various governmental authorities and because it is believed that the California settlements contain in their history information which should be of value to those who are interested in such activities. The leader of the California program was the outstanding authority in the field. The plans involved were of a fundamental and important character. The problems encountered were varied and difficult.

No attempt has been made here to compare these settlements with any others. In particular there is no comparison of governmental projects with private projects. Any such analysis would require a study of far larger scope than that which has been attempted here. This is a case study, and such generalizations as are made are due to the nature of the particular data or problem concerned and do not apply generally to various methods of land settlement.

BACKGROUND AND OBJECTIVES

In 1917 the State of California initiated a land-settlement program designed to improve the methods then in use and to encourage further developments. Under a land-settlement act, two settlements were established, one at Durham with about 130 settlers, and one at Delhi with about 230 settlers. (For location, see inset map, fig. 3, p. 412.)

While the settlements were later intended to be the beginning of a permanent and large-scale activity, the immediate purpose of the initial act was to

1 Received for publication March 11, 1942.
2 Paper No. 109. The Giannini Foundation of Agricultural Economics.
3 The author wishes to take this opportunity to thank the many people who have aided him in the study. Members of the University staff, those who were associated in the administration of the settlements, the settlers, and others have given liberally of their time and information. While space forbids listing them, the author wishes to emphasize that the study would not have been possible without their cooperation.
4 Assistant Professor of Agricultural Economics, Assistant Agricultural Economist in the Experiment Station, and Assistant Agricultural Economist on the Giannini Foundation.
5 California Statutes, 1917. Chap. 755. A copy of the act may be found in the Appendix of: Mead, Elwood. Helping men own farms. (Cited in footnote 8.)
demonstrate desirable land-settlement methods. In the past, the development of agriculture generally had been largely in private hands and its history had been clouded with many mistakes. The following paragraphs are descriptions of the situation as given by different authorities.

If a person owns a ranch that is profitable he is not generally anxious to sell it. If a man owns a herd of cows and desires to sell some of them he will, if he is a good business man, seek to sell his poorest cows. Land follows the same economic law. The ranches that come upon the market are apt to be those that have for some economic law become unprofitable. . .

It is a characteristic of California conditions that its soils are what is called "spotted." There may be very poor areas surrounded by land of great fertility. Men who make it a business to buy and subdivide land will find these less fertile areas offered for sale at much less than the ordinary run of land. For this reason, such areas are often chosen for subdivision. Doubtless the men who purchase these tracts for subdivision are not infrequently mistaken as to their real value, or at least do not appreciate the actual difference in productivity between lands of different qualities.

In the past, private colonizers have given little thought to the need of settlers. . . . Their ability has been mainly shown in writing alluring advertisements and working out selling devices. Too often the main appeal has been to the American passion for speculation. Clerks, artisans, and business men who knew nothing of farming and never expected to farm, have bought farming areas not to live on them and cultivate them, but to share in the increment which the development by others would bring. . . .

In one noted instance, eastern farm buyers were shown land that two years before had been bought for $7.00 an acre. They were told this and also told that the present price was $200.00 an acre; and they were advised to buy because next year it would sell for $400 an acre. This did not seem impossible; for the air was full of stories of money made out of land deals. Many who bought took a profit if there was a rise. If the land could not be sold at an advance, they lost the first payments and the land reverted to the colonizers.

In another district a tract of "goose" land sold one year for $5.00 an acre, the next year for $15 an acre, and was then subdivided and sold as garden soil for $125 an acre. Three brothers who were market gardeners bought farms there and moved on with their families. They found when the soil was wet it was a quagmire and when it was dry it could only be cultivated with dynamite. In three years time they had not raised enough to keep a goat alive and had to abandon their homes, losing their money and time and carrying with them a bitter feeling of injustice and wrong. Relatively few of the men engaged in this business were knowingly dishonest, but the majority of them were unthinking and ignorant. They did not know, nor did they apparently care to know, how settlers were to obtain money needed to improve and equip the farms sold them or how they were to earn a living income. The prosperity of the settler was his own affair. The land agents' business was to make money out of him rather than to make money for him.

This last quotation is from the report of the California Commission on Land Colonization and Rural Credits which, under authorization of the 1915 Legislature, had been appointed by Governor Hiram W. Johnson to investigate the land-settlement and rural-credits situation in the state. The commission

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† Hunt, Thomas Forsyth, and other members of the staff. Some things the prospective settler should know. California Agr. Exp. Sta. Cir. 121:15-16. 1914. (Out of print.)


* California Commission on Land Colonization and Rural Credits. Report . . . op. cit. p. 52.

† Ibid. p. 50.

toured the state and collected data on conditions found in many different areas. They visited a number of subdivision projects and had reports presented to them on the various factors that brought success or failure. A large number of items such as soil, size of farm, tenure, cooperation, farm labor, and availability of land, received attention. They gave particular attention to speculation and credit. Speculation was deplored as a detrimental activity. As to credit, they found that the average rate of interest on contracts was 6.9 per cent and on bank and private loans 8.0 per cent; both were regarded as much too high. The average time of repayment, 5.8 years, was too short. Very often the buyers’ ready cash was used up in making the first payment, and it was extremely difficult to meet payments in the first years of development. The commission concluded as follows:

... in California the settler who has not had a large cash capital or some outside income has not been able to purchase a farm. We have not found a single settler who, bringing with him only the limited capital accepted by state systems in other countries, has been able to pay for his land in the time agreed upon in his contract.19

The commission found that a large proportion of settlers in California were failures. Of those who prospered, many did so by speculative price changes, the profits of which were often used in further speculation. In any case, the cost of selling the land, estimated to be as much as one fourth the selling price, was a heavy load for the settler. The commission reported, moreover, that these faults were unnecessary, that they could be corrected by better methods, particularly under state aid and direction.

Among the features open to correction, the commission thought that none were more important than liberal credit and claimed that:

Some credit system more liberal than that of the Federal Farm Loan Act or that provided by colonization enterprises is therefore indispensable...15

In particular, the commission stressed the need for long periods of repayment, even to requiring no payments of principal during the first two years. They also emphasized the need for making loans on a larger percentage of the appraised value, loans up to 95 per cent being advised for land. Another essential need suggested was for the state to provide settlers with technical services from the College of Agriculture and other governmental agencies. Soil and crop specialists were to choose the land, judge its character, determine its crops, and decide whether it was worth subdividing. The settler was to be given all the information available concerning the value and productivity of his farm.

The report of this commission was an important step in the adoption of a settlement program by California and, in many respects, was a comprehensive

12 The evidence presented on the inability of settlers to meet payments in early years seemed to be particularly strong if orchards were planted.
13 California Commission on Land Colonization and Rural Credits. Report..., op. cit. p. 19. See also: Breed, A. H. The land settlement bill p. 1-10. Sacramento, 1917. [Argument presented to California Senate by author of settlement act.] (Files of Giannini Foundation.) As indicated in this quotation, a contrast was repeatedly drawn between the land-settlement systems of other countries and the system in the United States.
14 California Commission on Land Colonization and Rural Credits. Report..., op. cit. p. 37 and 53.
15 Ibid. p. 28.
16 Ibid. p. 84.
17 Ibid. p. 86.
18 Ibid. p. 54 and 86.
statement of the problems involved. Some features, however, which were thought to be desirable became apparent only as the settlement program actually got under way. The California State Land Settlement Board was created to administer the new program and in an early report stressed the advantages, for instance, of organization on a community basis. The statement was as follows:

It will be far easier for the people in this colony who are all making the same struggle, all faced by the same problems and all required to live in about the same way, to succeed, than it would be if they were scattered through different communities and surrounded by neighbors who either owned their farms or who were not trying to accumulate money to pay for one. The fact that all these settlers are in debt, that they are all compelled to work hard and be careful and saving is a source of strength to the less experienced members of the colony, and especially to those who lack strength of purpose.  

Integral parts of this community life were cooperation and social organization. Supplies would be purchased, produce sold, and even some production phases of the farm work carried on under cooperative methods. In this way some of the industries of the countryside could be brought back, farmers could regain control of the sale of their products, economies could be achieved, and morale would be kept high.

To make success more nearly certain, each settler would be chosen with great care, attention being given not only to his capital but to his experience, training, family, interests, and general attitude toward farming and toward cooperative effort. He would have to appear before the Board or other officials for questioning and only if he showed promise would he be accepted. This attention was to continue after the settler had taken over his farm. The policy of direction was described as follows:

The act provides for the employment of a farm advisor who will also be a business manager for the board. He will be on the ground observing how settlers cultivate their farms and noting who are industrious and who are idle and unworthy of financial aid. The presence and the influence of this practical guide will save many settlers from mistakes which would be costly. It will enable the board in dealing with settlers to discriminate between those deserving aid and the shiftless who would misuse it. The prompt and summary elimination of the latter is essential because of the demoralizing influence they may exert. Generous aid for the worthy and unsparing exposure of those who seek to abuse the state's interest will have great influence in promoting a spirit of community pride that, as a rule, is lacking in individualistic colonies. It will encourage the formation of an intelligent, coordinated community life, whose object will be not simply to make money, but to realize the best there is in modern civilization.

That the Board had the power to carry out its program of control is made clear in the law which provided that:

In the event of a failure of a settler to comply with any of the terms of his contract of purchase and agreement with the board, the state and the board shall have the right at its option to cancel the said contract of purchase and agreement and thereupon shall be released from all obligation in law or equity to convey the property and the settler shall forfeit all

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21 California Statutes, 1917. Chap. 755, Sec. 16.
right thereto and all payments theretofore made shall be deemed to be rental paid for occupancy.\textsuperscript{23}

No further details regarding the plan of settlement will be presented here since they will be better described later in the study. It must be emphasized, however, that the proponents were enthusiastic in their support of the program and were confident of success. Even at the start of the Durham settlement, they thought of the program as a demonstration of tried and proved methods and expressed themselves as follows:

The adoption of this policy \ldots will not \ldots be an experiment. It has been a financial and economic success in the thickly populated countries of Europe and in the sparsely populated countries of Australia and New Zealand.\textsuperscript{24}

That the proponents also believed that their program was of the greatest importance is made clear in the following statements:

The colonization and development of the unpeopled farm land of California is of such importance to all the people of the state that it should not be left to the separate action of landowners, but should be shaped in part by the carefully thought out purposeful action of all the people. This means that the state should have a land settlement policy and deal with this matter as a public problem.\textsuperscript{25}

It is to the interest of the whole state that its fertile lands should be cultivated and that active colonization should be promoted.\textsuperscript{26}

Increasing the number of people on farms and improving their living conditions were fundamental aims,\textsuperscript{27} which were reëmphasized when the war ended and ex-soldiers began to look for work. Here was an army of men to be placed. Farm life was regarded as particularly desirable for them.

These objectives were attainable, the proponents believed, because they thought there were available large acreages of fertile but unfarmed land. The California Commission on Land Colonization and Rural Credits described this situation as follows:

The state has an immense area of fertile and unpeopled land. Only eleven million acres out of the twenty-eight million acres are being cultivated.\ldots

\ldots great properties, owned by non-residents, are being cultivated by tenants or by nomadic and unsatisfactory hired labor. These great properties ought to be subdivided and cultivated by residents. From statistics furnished by C. L. Seavey, tax commissioner, it appears that 310 landed proprietors own over four million acres suited to intensive cultivation and capable of supporting a dense population. This would make 100,000 forty-acre farms. One firm owns nearly one million acres; one railroad owns 500,000 acres. In Kern County four companies own over 1,000,000 acres, or more than half the land in private ownership. The Kern County Land Company alone owns 356,000 acres. In Merced County Miller and Lux own 245,000 acres. The evils of such ownership are every year becoming more apparent. We have at one end of the social scale a few rich men who as a rule do not live on their estates, and at the other end either a body of shifting farm laborers or a farm tenantry made up largely of aliens, who take small interest in the progress of the community. Political stability, the best results in agriculture, and satisfactory social conditions require that

\textsuperscript{23} California Statutes, 1917. Chap. 755, Sec. 22.
\textsuperscript{24} Mead. Government aid and direction in land settlement. \textit{op. cit.} p. 76.
\textsuperscript{25} California Commission on Land Colonization and Rural Credits. \textit{Report \ldots op. cit.} p. 82.
\textsuperscript{26} \textit{Ibid.} p. 7.
\textsuperscript{27} Mead. Helping men own farms. \textit{op. cit.} p. 10.
this inheritance from a Mexican land system and former land laws of the United States be abolished.\(^{28}\)

The proponents of state action planned to bring about rapid development of these areas. (For the extent of their program see p. 410.) Moreover, they not only believed that there was land available but also that there was a need for more farm products. They described the situation as follows:

The state now buys a large part of its meat and many other farm products abroad. Increased production would lessen the cost of living and keep at home money now sent to other sections to pay for food products.\(^{20}\)

\(\ldots\) this nation is faced with a shortage of food and how to obtain three square meals a day is becoming a vital problem.\(^{30}\)

The lack of population which was believed to exist in agriculture was explained in part by the attractions of the city and in part by improper conditions in the country. Dr. Elwood Mead, Chairman of the California Commission on Colonization and Rural Credits, described the situation as follows:

The main reasons \(\ldots\) are the high wages and easy conditions of labor in cities and the obstacles which high land prices and high rents present to men who seek to become farm owners. When Henry Ford made $5.00 a day the minimum wage for unskilled workers for his factory, he started a competition for labor that the farmer could not meet.\(^{31}\)

'People cannot be kept on the land where non-resident ownership and tenantry prevail. Nothing short of ownership of the land one toils over will suffice to overcome the lure of the city. At any sacrifice, at any cost, the people who farm the land must be enabled to own it. On such ownership the life of a modern nation may depend.'\(^{32}\)

The proponents of land settlement not only wished to encourage the development of the small family-owned farm, they also proposed to establish homes for farm laborers whose position was deplored by Dr. Mead as follows:

In no particular is there greater need of change in American rural life than in the present position and treatment of the American farm laborer. The American farm of the future has special need for intelligent, dependable, trained men, who are willing to work for wages. They are as essential to the success of agriculture as are our farm owners. Furthermore, unless American democracy is a sham there is the same need for insuring that the family of the farm laborer shall live a comfortable, independent life, with opportunities for education and intellectual development, as there is for insuring these advantages to the farm owner.

It was not necessary during the era of free land to pay much attention to this matter. Good laborers remained on farms until they could save money to become owners. They were recognized as the social equal of farm owners. But these conditions are gone. The American farm laborer now lives, as a rule, in a bunk-house; he has no social status, and competes with the Asiatic and the peon and degenerates into a hobo. If he is married it is rare that a home is provided close to his employment, and he is usually separated from his family for long intervals, which is bad for the family, bad for the laborer, and bad for society.

The result is that the intelligent and aspiring American who cannot afford to own land is leaving the country and going to the city; and the social conditions of the farm are suffering.\(^{33}\)

\(^{28}\) California Commission on Land Colonization and Rural Credits. Report \(\ldots\) op. cit. p. 7-8.

\(^{29}\) Ibid. p. 7.

\(^{30}\) Mead, Elwood. How California is helping people own farms and rural homes. California Agr. Exp. Sta. Cir. 221:1. 1920. (Out of print.) (The reader should recall that this was written just at the end of World War I.)

\(^{31}\) Ibid. p. 1.

\(^{32}\) Mead. Helping men own farms. op. cit. p. 10.

\(^{33}\) Mead. Government aid and direction in land settlement. op. cit. p. 79.
Thus the laborer was to have a home where he could live with his family and employ his time profitably when not working for wages. By keeping a garden, a cow, some pigs, and poultry, he could reduce the cost of living. Most important a home of their own would make the laborer and his family independent and self-respecting. White Americans would be attracted by such a life. The land-settlement program was thus designed to be an aid in building up a “commonwealth of independent white farmers and laborers.”

The proponents of the California State Land Settlement Act were not alone in their belief in these objectives. President Theodore Roosevelt in appointing the Commission on Country Life said that:

... the permanent greatness of any state must ultimately depend more upon the character of its country population than upon anything else.  

This commission in their report claimed that there were many possibilities of development of agriculture. Their statement follows:

According to the reports of the United States Geological Survey, there were more than seventy-five million acres of swamp land in the country, the greater part of which are capable of reclamation at probably a nominal cost as compared to their value. It is important to the development of the best type of country life that the reclamation of the lands in rural regions proceed under conditions insuring their subdivision into small farm units and their settlement by men who would both own them and till them. ... As a rule they are extremely fertile. They are capable of sustaining an agricultural population numbering many millions; and the conditions under which these millions must live are properly a matter of national concern.

Many of these objectives, moreover, were becoming concrete reality in the work of the United States Reclamation Service. The Reclamation Act had been passed in 1902 and by 1917 one million acres were being irrigated in projects developed by the Service. The proponents of the California program, such as Dr. Mead, however, claimed that the federal program was not adequate. He said that little distinction was made between good and bad land. Estimates of the probable cost of improving and equipping a farm were not made or were insufficient. The land was not made ready for the application of water—as essential a part of reclamation as the building of canals and reservoirs. Settlers were not chosen on the basis of either personal qualities or capital. The settler was left to himself in planning and building his house and barn, in choosing livestock and equipment, in selecting crops, and in determining cultural practices. All of this took valuable time, made the farm development slow and wasteful, and often meant that the settler failed. Dr. Mead summed up his criticism as follows:

There is so much that is admirable in the Reclamation Act and in the manner in which its engineering and operative features have been carried out that one is reluctant to call attention to its vital defects. But the part which is good only emphasizes the part which is hopelessly bad.

The engineering requirements of the Reclamation Act were carefully thought out; the agricultural and economic needs of settlers were ignored. The things needed to create values in land were provided; the safeguards which would insure those values going to the right people were overlooked.
In order to correct this situation the California State Land Settlement Act provided that the engineers not only were to build reservoirs and canals but also were to develop the farms and the community. The settler was not to toil for years getting his farm in shape but was to have this work done properly for him, at least in part, before he arrived.

Dr. Mead had long been regarded as an outstanding authority on irrigation and settlement matters and was in an excellent position to describe the work of the Reclamation Service because in 1915, as chairman of a Central Board of Review, appointed by the Secretary of the Interior, he had spent several months investigating the situation he described. In fact his life had been devoted to similar studies. As early as 1889 he had sponsored the reform of irrigation laws in various western states. From 1899 to 1907 he had headed the irrigation and drainage investigations of the United States Department of Agriculture. From 1901 to 1907 he had served as Professor of Institution and Practice of Irrigation at the University of California. In 1907 he had been invited to Australia as chairman of the Rivers and Water Supply Commission for the State of Victoria. While in Australia he had kept in close touch with the United States and had encouraged an interest in land settlement among friends here, notably Professor Thomas Forsyth Hunt, later Dean of the College of Agriculture, University of California. In 1915, Dean Hunt, because of his interest in the subject, established in the College of Agriculture a Division of Rural Institutions and invited Dr. Mead to be its head. In this Division, among other subjects, the philosophy and practice of land settlement were to be studied and taught.

Because of his experience, Dr. Mead was selected as chairman of the new California State Land Settlement Board, which the Legislature created in 1917. The other members appointed by Governor William D. Stephens were Mr. Mortimer Fleishhacker, a leading financier on the Pacific Coast; Mr. Prescott F. Cogswell of El Monte, an able and successful business man and farmer; Judge William H. Langdon, lawyer and farmer; and Senator Frank P. Flint, another well-known financier. While the Board, owing to a technical change in administrative organization, did not function from 1921 to 1923, Dr. Mead continued as responsible head of the administration until 1924. To simplify the presentation, the Board will be referred to throughout the entire period of state activity as the responsible administrative body.

38 Specifically, in 1921 the Legislature created a Division of Land Settlement in the Department of Public Works. The original organization was reestablished in 1923. (California Statutes, 1921. Chap. 607. Also see: California Statutes, 1923. Chap. 411.)
INITIAL DEVELOPMENT

DURHAM DEVELOPMENT

The first task of the California State Land Settlement Board was to secure suitable land. The method used was to advertise for offers. Then the Board, aided by technical experts, considered each tract offered and made recommendations. The Dean of the College of Agriculture set a price for the piece of land selected as most desirable; the Board then negotiated for the purchase.39

The purchase at Durham, made early in 1918, was in the main of two tracts, one owned by Judge C. F. Lott, and the other by Stanford University. Mr. Richard White, an attorney at Chico, had an option on the Lott tract and asked $165,000 for it. The Board fixed $156,610 as their maximum and for a time it appeared that no deal could be made. Finally the Chico Business Men's Association raised the difference of $8,390. The Board paid cash for this land. The Stanford land cost $386,109. The Board paid 10 per cent as a down payment and amortized the remainder in forty semiannual payments at 5 per cent interest. Altogether 6,240 acres were purchased. The improvements were valued at about $40,000 and consisted largely of buildings. Part of the Stanford land west of Butte Creek, having been leased until 1922, was reserved from immediate settlement.40

Figure 1 is a soil map of the settlement area. This was prepared by the University of California Division of Soil Technology. The survey, made in the spring of 1918, was not available at the time of purchase. In its principal features, however, it resembles the Reconnaissance Soil Survey of the Sacramento Valley of 1913. Any differences are caused by the more detailed nature of the Durham survey. Of the three general areas that may be noted, the first is a rough stony area in the northeast, made up of Aiken stony clay loam, Tuscan clay loam, and similar soils. This land, having no value except as pasture, was appraised as such and was, in general, not subdivided. Parts immediately adjacent to the farms were sold very cheaply as pasture, the rest was leased to those who needed extra feed. The second area was the Vina clay adobe and related soils in the southern section. The third area was made up of Vina fine sandy loams, Vina loams, Vina clay loams, and related types.

As soon as the purchase of the tracts had been arranged, the engineers began planning the irrigation system and the subdivision. Mr. Milo B. Williams, an experienced irrigation engineer, was in charge of construction. Mr. George C. Kreutzer was made permanent superintendent. He had done similar work in Australia and had also been a farm advisor in California. A small but efficient irrigation system was built which brought water from Butte Creek and which in most years furnished sufficient water at 50 or 60 cents an acre. Figure 2 shows the subdivisinal plan as it existed in 1924. Farms are numbered and laborers' allotments are lettered. Most of the tract was divided into farms with

(See especially appellant's opening brief, p. 1–28; and reply brief of respondents, Elwood Mead et al., as members of and constituting the State Land Settlement Board, p. 1–42.)
the greater number varying in size from 20 to 80 acres. A few were smaller and those on poorer soil were larger. The farms on the adobe land consisted of two blocks each, one of adobe and a small one of the better soils. Allotment 35A, for instance, included allotment 35; allotment 19A included 19; and so on. This combination of two soil types, it was thought, would permit a diversified crop plan. Twenty-six farm laborers' allotments were laid out of from 0.4 acre

to 2.4 acres. Allotments 43A, 43B, 44, and some other small areas were reserved for administrative purposes. Allotment 17, centrally located and covered with beautiful old oak trees, was reserved for social use.

In order that all the allotments would be equally desirable, the possibilities of each one were analyzed so that the price set reflected the character of the allotment in relation to the price asked for the other places. The price asked for all the allotments was to total enough to cover the cost of the land to the Board, of improvements made by the Board, and of administration.\(^{41}\)

\(^{41}\) California Statutes, 1917. Chap. 755, Sec. 17.
In carrying out the program, the Board made considerable use of the technical aid which was available. The University of California Division of Soil Technology reported on soils and drainage conditions. The Division of Irrigation Investigations and Practice studied the suitability of the land for irrigation, the cost of constructing irrigation works, and the availability of water. The Division of Entomology and Parasitology surveyed health conditions, particularly the problem of malaria. The Division of Horticulture reported on the prospect for fruit trees. Other divisions also made reports. Farm advisors were consulted. The State Water Commissioner aided in investigating the

Fig. 2.—Subdivision map, Durham State Land Settlement, April, 1924.

42 The College of Agriculture gave every help. One view of the relation between the College and the Board was as follows: "The Land Settlement Board is nominally an independent body, but is really an agency of the Agricultural College." (California Commission of Immigration and Housing. A report on large landholdings in southern California with recommendations. p. 37. 1919.) This view, however, does not seem to be justified, though the two organizations cooperated in many ways. Dr. Mead, for instance, was employed and paid by both organizations and divided his time between them.
water supply and the Attorney General investigated land titles and obtained a settlement of a long-standing dispute over water rights on Butte Creek. The United States Department of Agriculture Bureau of Public Roads and Rural Engineering, assisted in preparing a contour map.

The first allotments were offered for sale on May 15, 1918, and almost all of them were immediately taken. Only a few remained unsold. Since the administration had put in a crop that spring on all land ready for planting, the settlement appeared to develop very rapidly. From the very first it was regarded as completely successful. Dr. Mead, enthusiastic over the program, described its importance as follows:

Before the first settlement at Durham was a year old, it had been visited and studied by officials of ten American States and five foreign countries. It was made the basis of Secretary Lane's plans for soldier settlements. It has affected vitally many men who have been coming to Durham constantly to learn what they should do in their private colonization schemes. With the passage of the Act, the state entered on a new economic era.

Because of the rapid development at Durham, the proponents decided to enlarge their program. Durham was intended to be only a demonstration in desirable land-settlement methods, but when Delhi was started the two were thought of as the beginning of a permanent and large-scale state activity. The Board in its first official report made the following recommendation:

The next legislature should amend this act and greatly broaden its scope. It was passed as an educational measure and its operation confined to narrow limits which will have been reached before the legislature adjourns. Land settlement should now be made a permanent feature of state activity.

The Legislature in 1919 approved the recommendation and appropriated a million dollars for immediate work. The Legislature also proposed a ten-million-dollar bond issue for a revolving fund. This issue was not voted on because the legislation was rendered void by the California Supreme Court for technical reasons. It might be noted here that in 1921 the Legislature approved a bond issue for three million dollars, but in the 1922 election this was rejected. In 1923 Dr. Mead proposed a twenty-million-dollar issue but could obtain no political support.

**DELHI DEVELOPMENT**

Most of the acreage at Delhi was bought in November, 1919, from Mr. Edgar M. Wilson of San Francisco. Part of it was owned outright by Mr. Wilson and part by a syndicate in which he had the largest interest and for which he acted as agent. The price for 7,654 acres was $92.50 an acre. The agreement called for one-third cash on the farm land and all cash for the Delhi townsite and

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44 Further details may be found in the various reports of the Board and in mimeographed reports of the various people concerned. (Files of Giannini Foundation.)
45 California State Land Settlement Board. Report.... June 30, 1918. op. cit. p. 11.
46 Mead. Helping men own farms. op. cit. p. 10.
49 Ibid. Chap 540.
50 Hatfield v. Jordan (1920). 183 Cal. 223.
51 California Statutes, 1921. Chap. 733.
52 Mead, Elwood. Letter. March 1, 1923. (Files of Giannini Foundation.)
certain other small areas. Some small acreages not included in the original deal were purchased later to round out the settlement. They included about 750 acres and varied in price from $100 to $233 per acre.

The tract lay 6 miles south of Turlock, principally between the Southern Pacific and Santa Fe railroads, and was cut through by the state highway. The climate was healthful, and the tract adjoined some of the more prosperous areas in the San Joaquin Valley. Water could be obtained from the Turlock Irrigation District, which was one of the best in the state and assured a plentiful supply.

Mr. Williams was again in charge of construction. For superintendent, the Board appointed Mr. Walter E. Packard who had been Assistant State Leader of farm advisors in California and Superintendent of the Imperial Valley Field Station. The technical aid which was made use of at Durham was also used at Delhi.

The 1922 subdivision plan is shown in figure 3. The farms averaged 28 acres in size. Laborers' allotments had sold so well at Durham that at Delhi the board authorized twice as many, relative to the number of farms. In all, about 66 laborers' allotment contracts were made at Delhi. There were also more than 50 poultry allotments, varying in size from 3 to 13 acres, approximately.

To facilitate irrigation installation and settlement, the land was divided into four units. The part that could be developed most easily was to be piped first, and the rest was to follow as rapidly as the engineers could economically proceed. Piping in the first and second units was largely completed during the winter of 1920–21; in the third unit during the winter of 1921–22; in the fourth, or Ballico unit, in part during the winter of 1922–23, and a little more, 15,000 feet, during the winter of 1923–24.

The Irrigation System.—The irrigation system at Delhi was a rather elaborate one and, together with leveling, was perhaps the most important item of expense. An estimate had been made of the cost in 1918, at the time when the tract had been first offered to the state. When the land was again considered in 1919, this estimate was revised to take account of price changes.\(^{53}\) Since, according to this report, only some 1,500 acres could be irrigated by gravity, and since the soil was porous and the topography was rolling, pumping plants and a concrete-pipe-distribution system were advised. The estimated per-acre cost, as of August, 1919, of the pipe-distribution system and pumps installed was $29. The cost of leveling land for alfalfa plus farm-service ditches, structures, and pipe lines was put at $40. These two items totaled $69 per acre.

Once on the land, however, the engineers concluded that more extensive piping was necessary, and in consequence, pipe was installed for most of the farm laterals. While the estimates included 26 miles of concrete pipe from 42 to 18 inches in size, the installation as of June 30, 1923, included 143 miles of pipe from 30 to 6 inches in size.\(^{54}\) Naturally this new plan brought about a great change in the cost of farm laterals which eventually averaged $54 an


\(^{54}\) Brown, L. N. [Report of engineers to California State Land Settlement Board relative to cost of irrigation system as of June 30, 1923.] March 26, 1924. (Typewritten; in files of L. N. Brown.)
Fig. 3.—Copy of subdivisonal plan, Delhi State Land Settlement, September, 1922.
acre. The estimated cost of $29 per acre for the distribution system was quite accurate, for the actual cost was figured by the engineers at $33 per acre. It is not known, however, just how the engineers allocated the overhead costs between the distribution system and the farm laterals.

The cost of leveling was far greater than expected. During the winter of 1921–22, the settlement officers made a survey which included an inventory of improvements made and also plans for further improvements. The data must have been accurate because loans were made in accordance with them; but since the terminology used was inexact, there was ambiguity in meaning. Leveling in some instances meant a complete job with checking; in some instances it meant without checking; and in others only rough leveling. In some cases, the acreage included the entire farm, and since portions used for crops other than alfalfa would not require such careful leveling, the cost given is low. The range was from $13 an acre to over $75. The cost for most farms was from $33 to $45 with $35 as a conservative average. An extreme case was that of a settler who was billed by the settlement office for $120 for the leveling, seeding to alfalfa, and spring irrigating of 1 acre, although the estimate for the job was $45.

With the pipe laterals costing $54 an acre and with leveling for alfalfa costing $35, the total cost was about $90, or more than double the estimated $40. Adding the distribution system at an average cost of $33 gives a total average of over $120 for bringing the water to the land and preparing for alfalfa as compared with the 1919 estimate of $69.

The costs incurred constituted a heavy drain on the resources of the Board and were not anticipated. This was due to the fact that the Board did not know how extensive a pipe system would be necessary or how much leveling would be needed. The engineers in their 1918 and 1919 report (cited in footnote 53, p. 411) had recommended a detailed survey in order to obtain this information but the Board had not considered it necessary. As will be described in a later section (p. 440–42), price changes cannot be held responsible.

Other pertinent information concerning the cost of the irrigation system is as follows. The estimated cost for 24-inch pipe installed was $1.00 per foot; the actual cost was $1.925 in 1920–21 and $1.774 in 1921–22. That the cost of the distribution system did not increase proportionately may have been due to the fact that the size of pipe installed was considerably smaller than the estimate called for. On the other hand, the mileage of distribution pipe was considerably greater for about the same acreage. The only increased cost in basic items such as labor or materials was a very slight 3 or 4 per cent rise in cement prices. (See fig. 5, p. 441.) Other items were lower in price. Because of the large amount of pipe needed, and because of the wish to reduce costs and to provide pipe exactly suited to needs, the Board built a pipe factory. Mr. Brown, in his 1923 report, stated that the factory with equipment and special railway siding, cost $41,017.19. He added that:

In order to get a comparison of commercial factory costs to our own factory costs, we

55 Files of Giannini Foundation.

56 California Department of Public Works, Division of Land Settlement. Report of the Division of Land Settlement, a subdivision of the Department of Public Works of the State of California, to accompany the first biennial report of that department, September 1, 1922. p. 59. 1922.
asked Mr. Fred Stanley, engineer for the California Associated Concrete Pipe Manufacturers, to give us the commercial rates. He complied with our request and we have worked out comparative costs. 57

Mr. Brown's summary was as follows:

<table>
<thead>
<tr>
<th>Years</th>
<th>Commercial Cost</th>
<th>Factory Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>1920-21</td>
<td>$160,526.00</td>
<td>$101,272.00</td>
</tr>
<tr>
<td>1921-22</td>
<td>$129,309.00</td>
<td>$66,935.00</td>
</tr>
<tr>
<td>1922-23</td>
<td>$126,627.00</td>
<td>$73,361.00</td>
</tr>
</tbody>
</table>

Saving to Colony: $174,894.00 on three years' business or about 4 times the cost of the factory. 58

While this information indicates that economical methods were used in construction, other reports give a less satisfactory picture. Almost every settler seemed to have some grievance; it is difficult, however, to fix the importance of the items they objected to. Some of the pumps were evidently of the wrong size. One farm system and possibly more were laid out in such a way that the water could not be easily applied, and the lines were subsequently moved—an expensive operation. Some pipe is reported to have been exposed to frost before being entirely cured and was consequently weak. The charge was made that surge pipes were not installed at some points where subsequently found to be needed. In 1923 and 1924 some pipe was laid which was too small; this was not due to design but to inadequate funds. It must be emphasized that construction was never completed. In 1931 when the state turned the system over to the Turlock Irrigation District, the district required that the state install some larger pipe and make a few other changes. These changes cost about $25,000. While these faults cannot be ignored, the writer has come to the conclusion that the system as a whole has been reasonably satisfactory. 59

57 Brown, L. N. [Report of engineers to California State Land Settlement Board relative to cost of irrigation system as of June 30, 1923.] March 26, 1924. (Typewritten; in files of L. N. Brown.)

58 Ibid.

59 The following statements about the irrigation system may be quoted:

"I have made a rather careful analysis of the proposed concrete pipe distributing system for the first unit of the Delhi Colony.

"This analysis shows that with a reasonable allowance made in the quantity of water to be used when the project is fully under irrigation, the carrying capacities of the various lines are sufficient to meet all reasonable requirements." (Beckett, S. H., Associate Professor of Irrigation Practice, University of California. Quoted in: California State Land Settlement Board. Report... September 30, 1920. op. cit. p. 30.)

"In some cases at end of piping, limits of money forced use of smaller pipe than needed for full flow of water. This was due to financial needs, not to poor irrigation engineering." (Williams, Milo. Interview. March, 1935.)

"Theoretically the pipe system is superior to any other provided ample water can be supplied at all points, but in practice there have developed many disappointments along this line. The system was not thoroughly tested out until the dry season of 1924-25, when a considerable portion of the total acreage required irrigation. It thus developed that many of the pipe lines were of inadequate size, that there was a lack of proper gates and controls, and also deficiencies in mechanical and electrical appliances. Surge pipes were ill constructed and some have fallen with the wind. During the past two years much time and considerable money was necessarily expended in the effort to eliminate these deficiencies. Additional pipe lines have been laid; cross connections made, gates and control devices of a permanent type installed, automatic compensators and other electrical devices put in so that the system is now in practical and fairly economical operation." (Wooster, C. M., Chairman of the Board, 1924 to 1927. [Report to Governor F. W. Richardson.] December 31, 1926. Typewritten; in files of C. M. Wooster.)

"The water supply is among the very best in the entire state and during the recent dry season of 1924 no shortage of water was experienced in the colony. . . . During 1924 a total
Drainage.—It was soon discovered that hardpan and the undulating topography prevented drainage and that in consequence the water table in the depression areas rose enough to kill the crops. To correct this the administration installed a number of drainage wells and pumps which, on the whole, were successful. Some crops, however, were lost, to the serious detriment of the settlers concerned. The Board also was put to heavy expenditure, though just how much is not known. The auditor in 1931 reported that a total of $117,512.41 had been spent for “wells, pumping plants, etc.” While he listed engineering, surveys, pipe manufacture, pipe lines, pipe line repairs, and structures separately, he made no classification of the use of the wells and pumping plants. A number of the pumping plants were designed for lifting water from the river or canals, and a few wells were designed from the first not only for drainage but also to provide water when the Turlock District would not be supplying water in the winter time. Consequently, it has not been possible to separate these various uses. It is believed, however, that the larger part of this amount was spent in order to provide drainage.

The engineer who surveyed the tract for the drainage system made the following statement in his report:

Should this tract become irrigated and water was used as lavishly as it has been on many irrigation projects there will be a decided tendency to raise the water table and cause some of the depressions to become waterlogged.

Poor drainage, should it develop, from any cause will be limited to the depressions and it would probably be impossible to waterlog any considerable portion of the tract even with extravagant use of water.

Although it is a well-known fact that poor drainage often accompanies irrigation, it is usually difficult to foresee just how it is going to develop and a plan for drainage made before any indications for its need appear may either be inadequate or needlessly expensive.

The author believes this is a fair statement of what could be learned about the tract. In any case no provision seems to have been made for the expenditures that were entailed. (See section on “Financing at Delhi,” p. 451.)

Poultry Farms.—The poultry farms at Delhi had not been included in the original program. Two subsequent developments seem to have brought them

of 4615 acres was irrigated at an operation and maintenance cost of $1.98 per acre.” (Smith, J. Winter, Superintendent and Engineer at Delhi, 1924 to 1931. [Report to California Department of Agriculture, Division of Land Settlement. July 29, 1927.] Typewritten; in files of California Department of Finance, Division of State Lands.)

“There seems to be some question as to the adequacy of certain pipe lines and other works serving some of the units of the colony, and this condition should be either rectified before the District undertakes operation or provision made now for necessary expenditures to be made at the end of the first year’s operation by the District.” (Meikle, E. V., Chief Engineer, Turlock Irrigation District. Letter to J. Winter Smith relative to taking over of Delhi system by District. December 31, 1929. Files of State Land Settlement Office. Delhi, California.)

“It is estimated that an expenditure of $25,000 will be necessary to put into shape the present system of pipe lines distributing water to land now under irrigation, amounting to approximately 5,000 acres, it is said. . . . This estimate was given by John D. Sillerman, former assistant engineer in the Colony.” (Anonymous. Irrigation problems important in settlers’ adjustment plans, opinion of Wednesday’s meet. Delhi Record 6(49):1. January 10, 1930.)

California Department of Finance, Division of Budgets and Accounts. [Report on the Delhi State Land Settlement as of August 13, 1931.] (Typewritten.)

Weir, W. W., Drainage Engineer in the Experiment Station. [Report to California State Land Settlement Board relative to Wilson tract, October 31, 1917.] (Typewritten; in files of W. W. Weir.)
into the plan. For one thing, some applicants did not have the capital needed for buying a dairy or fruit farm and small poultry farms suggested a way of bringing these men into the settlement. At the same time one area had proved to have such poor soil that the chance of profitably raising crops on it seemed doubtful. Since the farms were already piped, steps had to be taken to realize on the investment. According to report, it was thought that the poultry farms could succeed regardless of the nature of the soil. By the summer of 1922 buildings had been erected that would shelter 30,000 hens. Some veteran trainees were settled on these farms, and a special poultry instructor was brought in. The administration expected the area to be a poultry center and named roads serving it Petaluma Road and Feather Way.

**Townsites.**—The townsites of Delhi and Ballico had been plotted and recorded by former private settlement organizations but no development had ever taken place. The townsites were made up of 300 acres at Delhi and 200 acres at Ballico. At Delhi the Board drew up elaborate plans and spent considerable money in development. It was to be a model town built according to specifications drawn up by the University of California Division of Landscape Design. The Southern Pacific Railroad and the state highway crossed its center. On one side the residential district was to have a nucleus of a civic center, a main park and playgrounds, and the school grounds. Neighborhood park playgrounds were to be located in the center of many of the larger residential blocks. In the civic center the architecture was to be restricted to a mission-adobe style to insure uniformity and beauty. On the opposite side of the track provision was made for warehouses and manufacturing.

To start Delhi off, the Board immediately erected a number of buildings, and by November, 1920, the expenditures on the townsites totaled $79,901. The chief items included an administration building ($10,255) with a garage ($993) and a well-and-pressure system ($1,552.77); a pipe-yard shed ($17,142); a warehouse ($7,386); bunkhouses, barns, shops, and five staff houses. One staff house cost $7,256; three cost over $5,000 each; one was under construction; and a staff-house well-and-pressure system had been built for $1,537. Considerable road grading and tree planting were done on the townsite. Private interests, on the other hand, put very little money into the town. At Ballico, a school building and a few laborers' allotments were built.

Many settlers repeatedly questioned the desirability of some of these expenditures and were particularly resentful about the staff houses because they were so much better than the settlers' own houses. The construction may not have been necessary since Turlock was close by and was used as a place of residence by some of the staff. The Board assumed, however, that the town would grow and that there would be a need for such houses. An office and the buildings connected with the pipe factory were, of course, necessary. The book value given the townsites by the Board in 1924 was $301,195, only a small portion of which was realized.

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62 California Department of Public Works, Division of Land Settlement. Report... September 1, 1922. *op. cit.* p. 44. Later reports indicated that shelter for as many as 60,000 hens were located in the settlement.
64 California Department of Finance, Division of Budgets and Accounts. [Report on the Delhi State Land Settlement as of December 31, 1924.] (Typewritten.)
FARMSTEAD PLANNING AT THE SETTLEMENTS

One of the features of the state program was to have the engineers not only construct the irrigation system but also plan and, to a degree, develop each farm. Every effort seems to have been made to realize this objective. Farms and ditches were laid out so that no farm would be needlessly cut up. An engineer, Mr. Max Cook, was employed to supervise the building program of each settler. He worked first at Durham where his work was described as follows:

The plans of houses for settlers and their location on each farm were worked out by the farmstead engineer after he had gone into this matter fully with the settler and his wife. The plans . . . . included the grouping of all the farm buildings and arrangement of roads, the garden, the orchard and fields of each farm. The settler began therefore with a working plan, not only for present, but future improvements. Nothing has been done in a casual or haphazard fashion and, as a result, a country neighborhood has been created in less than a year’s time which, because of convenient arrangement of roads and farms and attractiveness of houses, is a source of pride and satisfaction to the settlers and presents a favorable contrast to the unplanned development of any new community elsewhere.65

Later at Delhi he was able to use many of his plans again and thus save on the expenses involved. The scope of his work there expanded steadily and in a press notice he described it in the following statement.

The activities of this department embrace not only planning, designing, quantity surveying, obtaining competitive bids, letting contracts, and supervising construction of all classes of farm, townsite, and administrative buildings, but include also making individual farmstead layouts for all settlers, determining location and arrangement of buildings, lanes, corrals, poultry runs, domestic wells, orchards, vegetable gardens, etc. Individual settlers are given unlimited consultation in acquainting them with state housing laws, dairy laws, sanitary rules, Board of Health recommendations relative to sewage disposal, protection of domestic water supply, insurance rates and hazards, requirements of good practice in plumbing, electric wiring, paint formulas, concrete mixing, chimney construction, carpentry, etc. All buildings are appraised and values set for basis of loans, and all buildings rented are scheduled by this Department.

Active interest and support is given to community development, services being extended to School Board and Settlers’ Cooperative Association. This included preparing plans and supervision of construction of the Community Hall at Delhi which was recently completed.66

Most settlers, particularly those at Delhi, could not afford satisfactory houses and planned to build only part of the house or, temporarily, even to live in garages or henhouses. The former device was common and plans were carefully drawn so as to permit later enlargement. That costs were kept down is evidenced by data which give the final average building development at Delhi per farm as $1,701, per poultry allotment as $1,405, and per laborers’ allotment as $903. (See table 2, p. 432.) There was, however, some waste at Durham where a number of buildings, such as barns and silos, were built and later left unused because the owner, either voluntarily or because of crop failures, shifted from one enterprise to another.

Although usually coöperative, each settler had his own wishes, which the engineers could not always gratify. When the officials acted, through their control over credit, to prevent what they thought were wasteful expenditures,

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66 Anonymous. Progress report on building settlers’ homes in the California State settlement at Delhi. Press notice. (Mimeograph; in files of Giannini Foundation.)
they sometimes aroused ill feeling. If the settlers' expectations of more comfortable homes in the future had been realized, this early ill feeling would doubtless have been forgotten. As it was, however, the settlers were left with some very poor houses and they were bitterly resentful.

**THE SETTLERS**

Selection of Settlers.—The Board planned to select settlers on their ability to succeed and to fulfill the objectives in mind. This program was possible to some extent at Durham. As there were at first more than one applicant for most farms, the Board could discriminate and still sell the land. But the surplus of applicants did not last long. Moreover, it is sometimes claimed that even where selection was possible, the results in a few cases were not what had been hoped for; the administration was influenced more by the personality of the applicant than by his abilities. Some of the settlers seem to have been attracted more by the reform elements of the program than by the opportunity to buy and develop a farm. In general, however, most of the settlers at Durham were apparently of a type that any community would consider desirable.

The same program for selection was planned for Delhi but was never possible of fulfillment. Since there was from the first a lack of settlers, everyone who satisfied the minimum requirements was accepted. A curiously diverse group, in fact, were admitted to the Delhi tract. It was later learned from the records that 38 per cent of the settlers had come directly from farms, that 23 per cent had been reared on farms, that 27 per cent had farmed for over twenty years, and that 8 per cent had had no farming experience. Only a few had lived on irrigated farms. Many listed themselves as laborers. While a large number of the Delhi settlers were inexperienced and some were unfit, the majority appear to have had the fundamental requisites of desirable settlers.

Veterans were always numerous at Delhi, at one time making up about one half of the settlers. In fact, the law required that ex-service men be given preference; but this never excluded other people, since there were never enough applicants to take care of the available allotments. The United States Veterans Bureau soon placed 12 of their trainees in the settlement, and later as many as 23 are reported to have been located there. Each man received

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67 Supporting information is confidential.

68 The Division of Land Settlement in 1922 stated that some of the settlers in their applications had listed themselves as follows: storekeeper, civil engineer, auto mechanic, traveling salesman, sign painter, plasterer, bookkeeper, telegrapher, carpenter, photographer, hand-coloring photographer, African guide and big-game hunter, band leader, minister, orchestra player, florist, radio operator, movie-machine operator, shipbuilder, and sailor. There were teachers of high school, grades, kindergarten, piano, stringed instruments, elocution, and aesthetic dancing. There were a real-estate salesman, a land appraiser from the Federal Land Bank, an irrigation engineer, and a farm advisor. There were a milliner, a dressmaker, a rug weaver, a street-car conductor, a railway locomotive engineer, an electrician, an electrical engineer, an automobile salesman, a cheesemaker, a banker, a gardener, a fireman, an osteopath, a physician, a trained nurse, a baker, a house painter, a shoemaker, a stenographer, a plumber, a policeman, and an aviator. (California Department of Public Works, Division of Land Settlement. Report... September 1, 1922. op. cit. p. 40.)

69 Smith, J. Winter. (Files of State Land Settlement Office. Delhi, California.)

70 California Department of Public Works, Division of Land Settlement. Report... September 1, 1922. op. cit. p. 40.

71 California Statutes, 1919. Chap. 450, Sec. 15.

72 California Department of Public Works, Division of Land Settlement. Report... September 1, 1922. op. cit. p. 47.
vocational training and from $95 to $155 monthly plus an initial $300 for equipment.

_Early Attitude._—Few items concerning the history of the settlements are more often insisted upon by people acquainted with the settlers than that during the first years the settlers, as a whole, were very coöperative and enthusiastic. Mr. R. V. Wright, a member of the Agricultural Extension Service of the University of California, who did a great deal of work on the settlement at Durham, reported as follows:

The spirit of coöperation that prevails at the Durham State Land Settlement Colony is the thing that impresses a person most forcibly when visiting the colony.

Community production and coöperative marketing are considered as vital points in the success of the settlers. Along with the development of the phases that affect the economic side of the colony, the settlers are also developing a wonderful spirit of fellowship that shows up in the community park and meeting place. The aim of the settlers is to create a social and civic condition in the country equal to that of the city, realizing that economical success depends to a greater or less extent upon the morale of the settlers and their families.73

The Board itself reported the situation as being as follows:

In the earlier pages of this report, the superintendents of the Durham and Delhi colonies have told of the coöperative activities of the settlers and of the fine results which have followed. ... All are agreed that the finest feature of these settlements is the enthusiasm and civic pride of the people.74

Community Activities._—This spirit was shown particularly well in the coöperative and social activities established at the settlements. These activities, of course, had been a part of the original plan which was that settlement should be by groups and not by individuals, but coöperation in business and social life would never have attained the importance it had for a time if the settlers had not given it their wholehearted support. Purchasing and selling coöperatives were organized at both settlements. At Durham, particularly, a milk-selling association and a cold-storage association formed the hub of the dairy industry.75 Purebred sires were purchased and managed on a community basis. Arrangements were made for a veterinarian to live at Durham, and owners contracted with him to have their herds cared for at a fixed annual sum.76 This coöperative spirit was exemplified in an early purchase of dairy cows by the settlement committee charged with that duty. After the purchase the tuberculin test revealed that nearly a carload were reactors. Although individuals had legal title and stood to take the loss, the community voluntarily contributed half the purchase price to the parties directly concerned.77

Unfortunately, however, at both settlements most of the coöperative attempts were unsuccessful. Criticism and disputes were common. According to the superintendent of the Delhi settlement, who had made every effort to encourage coöperative buying:

The attempt ... was made in order to prove whether or not this sort of activity could be carried on with any saving to the colony. The bad outcome led to a discontinuance of this work.78

74 Ibid. p. 46. 75 Ibid. p. 14. 76 Ibid. p. 17.
77 Mead. Helping men own farms. op. cit. p. 144.
78 Packard, Walter E. [Report on the Delhi State Land Settlement as of February 1, 1924, to C. M. Wooster, February 8, 1924.] (Typewritten; in files of California Department of Finance, Division of State Lands.)
A similar endeavor was made with social activities. Community halls were built at both places. Fairs were held to advertise the tracts and to encourage competition among the settlers. Organizations for many purposes were developed. But like the coöperatives most of these activities soon disappeared.

Early Dissatisfaction.—From the very first there were, of course, a few settlers who caused trouble. Some were totally inexperienced in farming and some anticipated that state aid and direction assured them of successful development regardless of effort. Some were unwilling or unable to make the effort necessary to establish themselves. The administration seems to have made every effort to encourage and aid these people. The only criticism that might be made is in regard to leniency. Some settlers were left on their allotments although it now appears clear that they had little prospect of success. The need for keeping land under contract, the political difficulties of foreclosure, and an earnest desire to help, explained the administration's delay and liberality.

The following data show the approximate number of allotments owned and occupied at Delhi by one, two, or more settlers during the period considered, that is, 1920 to 1930. One hundred and fifteen allotments had had only one settler owner each during the period; 155 allotments had had two each; 51 allotments had had three each; 11 allotments had had four each; 2 allotments had had five each; and 1 allotment had had eight different settlers during the period. Of these, 52 were laborers' allotments—that is, tracts of less than 3 acres. Of the laborers' allotments, 12 had had one owner; 23, two; 13, three; 3, four; and 1, eight. Evidently the laborers' allotments changed hands much more frequently than the other tracts. Most of these changes occurred during the early years. While it is not known whether this movement was exceptional in such projects, it does appear to be indicative of some discontent.

79 For example, one woman with evidently no farm experience was accepted only because settlers were needed and because she insisted despite Mr. Packard's advice. Placed on a partially developed allotment with some berries planted on it, she made no move to care for them until they very much needed attention. Then she called at the office and asked when they were going to send some one over to do the work. As another example, a couple, while being taken out to their allotment, enthusiastically told of a correspondence course that the husband had taken on farming and passed with a mark of one hundred. Among other things he described what he had learned about raising alfalfa. When they arrived at the farm, he looked around and wanted to know what was growing in an adjacent field. It was alfalfa. (Packard, Walter E., Superintendent. Delhi State Land Settlement.)

Another settler abandoned his allotment twice within two years but was allowed to return each time under a special agreement, which he immediately repudiated. He neglected his trees so that the settlement officials had to arrange for their irrigation. The Division of Land Settlement paid the Horticultural Commission $200 for destroying weeds that he permitted to grow. During the three years he held the place he made no payments. An arbitration committee was appointed with his approval; but he refused to accept its decision. As he was a veteran, the Vocational Board gave him a training allowance; but they had to withdraw it. When the Board officials threatened foreclosure he obtained delay by appealing to the Governor. Not until the third year did the state really start proceedings, and even then it did not carry them out. At that time his accumulated delinquencies had mounted to more than his equity, but the state paid him $800 to sign a quitclaim deed and turn over the property. (Files of State Land Settlement Office. Delhi, California.)

Another settler had become discouraged by 1922 and when asked to take out a Federal Land Bank loan, he acquiesced only on condition that the state loan him funds for further improvements. He was already delinquent when the Federal loan was made and failed to make any payments during the next few years. Foreclosure was started but never carried through. (Files of State Land Settlement Office. Delhi, California.)

80 Original data obtained from files of State Land Settlement Office. Delhi, California.
Although no comparable data are available at Durham, a somewhat similar situation prevailed. On February 15, 1921, the Division of Land Settlement advertised 7 farms and 3 farm laborers' allotments for sale. In September of the same year another listing was offered but only 1 allotment listed in the advertisements of February was listed in September, though 12 were offered.

No record is available of the number of settlers who left the settlements, but reports indicate that it must have been large, particularly of those on laborers' allotments. The laborers who came worked at first on construction, but with its end they found little else to do and many soon left. Since there were few opportunities for work among the settlement farmers—they themselves were frequently looking for work—very few agricultural laborers purchased the small allotments, although they occasionally rented them for a season. At both settlements a large proportion of those who purchased and stayed on the small allotments had pensions or similar incomes, or had jobs in near-by towns or in other areas. These people were attracted by the inexpensive homes.

SELLING THE LAND

The California State Land Settlement Board seems to have anticipated no difficulty in selling its land, and in the initial offering at Durham it had a large number of buyers. All the laborers' allotments and all but 4 of the farms were sold. However, while sales were frequent, there were always a few farms for sale, some by the state and some by settlers.

At Delhi, the administration found selling to be difficult from the first. The land was first available for sale on April 27, 1920, but by September 30 there were still 30 farms and 11 laborers' allotments for sale out of the 97 farms and 58 laborers' allotments offered. Unfortunately, sales became progressively slower and often were at a complete standstill. Because of the need to sell, a strong selling organization with widespread connections was soon built up.

The Board had hoped that little expense would be incurred in selling the land and described its work up to September of 1922 as follows:

The only expenses have been the legal advertising which the law requires, the printing and mailing of circulars of information, and the expenses of a man and automobile to show land seekers over the property. In all it does not amount to one per cent of the selling price of farms.

It is impossible to check the actual cost of selling the land because many expense items could be charged either to sales or to other phases of the work. It appears, though, that a number of the staff members gave a great deal of their time to selling and that if their work had been charged differently, the reported cost of selling would have been greater. All local expenses, however, were minor in comparison to the aid given by other organizations in advertising the settlements.

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81 California State Land Settlement Board. Durham. State land settlement farms. February 15, 1921. (Broadside; in files of Giannini Foundation.)
82 California Department of Public Works, Division of Land Settlement. History of the Durham state land settlements, table and description of available allotments at Durham. September, 1921. (Broadside; in files of Giannini Foundation.)
83 California State Land Settlement Board. Report ... June 30, 1918. op. cit. p. 11.
84 California State Land Settlement Board. Report ... September 30, 1920. op. cit. p. 35.
85 California Department of Public Works, Division of Land Settlement. Report ... September 1, 1922. op. cit. p. 16.
Dr. Mead had a wide acquaintance and was able to obtain a great deal of publicity for the settlements. Magazines and newspapers of every type carried articles or news items by Dr. Mead, by other officials, or by special feature writers. By an extensive correspondence Dr. Mead kept up editors' interest. The California Development Association and Californians Inc., both semi-public advertising agencies, included Durham and Delhi in their publicity for the state. The California Agricultural Experiment Station published two circulars on rural development and colonization. The Santa Fe and the Southern Pacific railroads gave a great deal of help. In one mailing the Santa Fe sent letters to 30,000 selected farmers in the Middle West. This advertising aroused tremendous interest and the Division of Land Settlement received upward of 10,000 inquiries in 1921. Besides obtaining this advertising, the administration did all it could to make the colony attractive; for instance, prizes were offered for the best-kept gardens. The Southern Pacific built an attractive station at Delhi, and the Santa Fe was asked to build one at Ballico.

Nevertheless, the land did not sell. When the third unit was opened, almost the entire north end was left unsettled. In the fall of 1922, with the fourth, or Ballico unit, to be opened, extra effort was put into selling. Seventy-five veteran trainees from Rough and Ready Island, an agricultural training center of the Veterans Bureau, were shown the land. Fifteen thousand copies of the introduction to a biennial report were distributed. A special land office was opened at Ballico with an assistant superintendent in charge. A widely advertised fair demonstrated the progress and spirit of the community; 2,000 people were fed at one sitting. The failure of the campaign, however, was abrupt and disheartening. When the new allotments were opened hardly an applicant came. In a few days the Ballico office was closed. Even inquiries ceased. There were 34 farms and 3 laborers' allotments for sale in the older units, 97 farms and 8 laborers' allotments in the Ballico unit. Out of these only 21 applications for farms and 6 applications for laborers' allotments were accepted that fall. Only a part of these applicants became settlers.

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86 Files of Giannini Foundation.
87 Mead, Elwood. How California is helping people own farms and rural homes. op. cit.
88 Seagraves, C. L., General Colonization Agent, The Atchison, Topeka and Santa Fe Railway Company. Letter to Elwood Mead. October 27, 1922. (Files of Giannini Foundation.)
91 Mead, Elwood. Letter to A. B. Fletcher, Director of Public Works. Sacramento, California. August 10, 1922. (Files of Giannini Foundation.)
92 Fletcher, A. B. Letter to Elwood Mead. September 14, 1922. (Files of Giannini Foundation.)
93 California Department of Public Works, Division of Land Settlement. Allotments in the Delhi State Land Settlement which are available, September 15th, 1922. (Typewritten; in files of Giannini Foundation.)
94 California Department of Public Works, Division of Land Settlement. Information for intending settlers regarding the Ballico unit of the Delhi Settlement, September, 1922. (Broadside; in files of Giannini Foundation.)
95 Anonymous. [Description of sales made at Delhi.] Press letter. (Files of Giannini Foundation.)
96 California Department of Finance, Division of Budgets and Accounts. [Report on the Delhi State Land Settlement as of December 31, 1922.] (Typewritten.)
The administration, however, immediately mapped out another campaign. The Board of Control voted $1,000 to finance necessary expenses, Mr. Kreutzer visited the Middle West to talk with interested people, and the two railroads and Californians Inc. advertised the trip. But he brought back only four or five applications. In this campaign they gave a great deal of attention to southern California and obtained help from local papers, county farm advisors, and farm bureaus. Both Mr. Packard and Mr. Kreutzer made special trips to Los Angeles and the surrounding area. Finally, the advertised capital requirement for farm allotments was lowered from $2,500 to $1,500. Still they could not sell the land; virtually no sales were made during 1923. Mr. Packard's final report in February, 1924, stressed the importance of sales as follows:

The most important consideration is the sale of farms, both to permit those to sell who wish to leave and to replenish the state funds. There are approximately thirty-two partially developed farms for sale in the settlement. If these could be sold, it would return to the Land Settlement Board approximately $26,000 in deferred payments to the state. There are 35 farms that are piped but not sold which, if sold, would return approximately $15,000 to the state. 97

The 32 partially developed farms Mr. Packard refers to were farms which settlers had left or wanted to leave. The 35 farms were those on which the state had placed some improvements. There were other large acreages waiting improvement. The total acreage unsold on December 31, 1924, amounted to 3,528 acres. It had a book value of $933,527.36. 98

This inability to sell land was not due to lack of publicity, sales effort, or expense. The reasons for there being unsold land will be given in the discussions on "Production Problems" and "The Economic Situation."

PRODUCTION PROBLEMS

DURHAM PRODUCTION PROBLEMS

Adobe Lands. — During the first years at Durham the only major production problem was with the adobe soil, which lay over a considerable portion of the southern section of the tract and which had been valued at $40 to $50 an acre. 99

(See soil map, fig. 1, p. 408.) The nature of this soil had been reported to the California State Land Settlement Board as follows:

The Vina clay adobe . . . will do well with grain, corn, rice and similar crops. Alfalfa could be grown but the slow penetration of water would make irrigation very difficult. Their heavy nature and tendency to become sticky when wet would make them difficult to handle. At the

96 Mead, Elwood. Letter to Chas. S. Fee, Southern Pacific Company. San Francisco, California. February 14, 1923. (Files of Giannini Foundation.)


98 California Department of Finance, Division of Budgets and Accounts. [Report on the Delhi State Land Settlement as of December 31, 1924.] (Typewritten.)

99 Kreutzer, Geo. C. Valuation and report on the Lott Estate to State Land Settlement Board. May 4, 1918. (Typewritten; in files of California Department of Finance, Division of State Lands.)

Kreutzer, Geo. C. Letter to Elwood Mead. January 15, 1918. [Report on investigation of Stanford, James, and Wilson tracts.] (Files of California Department of Finance, Division of State Lands.)

Stimmel, W. G. [Memorandum on prices of land owned by Stanford University and Charles F. Lott offered for sale to California State Land Settlement Board by W. G. Stimmel.] (Typewritten; in files of California Department of Finance, Division of State Lands.)
present time most of these . . . soils are being used for pasture or grain, though there is a large field of rice.\textsuperscript{100}

In the past, this area had not been farmed every year. Little irrigation had been tried except with rice which required large quantities of water. Although summer-fallowed, the grain crops were susceptible to drought. There is evidence that the Board and the settlers had more hopes about this soil than either the soil reports or the experience of local farmers justified. Alfalfa was tried again and again, as many as four times, but it always proved a failure. These attempts were particularly frequent on soils close by and related to the clay adobe. The report of the Superintendent regarding the adobe farms was as follows:

. . . due to two years' grain failure and the necessity of summer fallowing every other year, the lands in so small an acreage did not seem to work into suitable farms. Had the farmer developed his area to livestock instead of to grain alone we believe his chances of success would have been considerably greater, but this was not done for various reasons. The larger areas seemed to be too great a burden to continue to carry so the State Land Settlement Board arranged with the settler to take back his adobe portion and allow him to keep the loam block, in order that he could go on and improve a farm and home for himself instead of being a failure.\textsuperscript{101}

Financially, the farmers on the adobe soil were never able to make progress. The settlement farms, though similar in size to many in that area, were much smaller than those where barley and rice were grown. To work this adobe land, heavy and expensive equipment was needed which could never be made to pay except on farms several times as large as those the settlers had. There were great risks in such enterprises; the settlers with their small resources and heavy debts needed a more certain and regular income. Consequently the Board arranged to take back the adobe blocks. The details of these transactions are not available, but the Board, in order to reimburse the settlers for their equity, is reported to have credited the settlers with an equal amount on the land they retained.

\textit{Later Production Problems at Durham.}—During these same first years the production programs of the farmers on about 3,600 acres of the better soils seemed to be going ahead without general difficulty. At times there were some 1,500 acres of alfalfa and, by 1925, over 500 acres with orchard crops, mostly prunes, on these soils.\textsuperscript{102} The alfalfa was the most important crop in the settlement and on it depended the dairy enterprises in which most of the settlers were interested. While a number of individuals had serious difficulty from the start, until 1924 there seem to have been no widespread losses. From then on, however, very few farmers were able to obtain a satisfactory crop of either

\textsuperscript{100} Shaw, C. F. [Report to California State Land Settlement Board, December 1, 1917, relative to Durham soils.] (Typewritten; in files of California Department of Finance, Division of State Lands.)

\textsuperscript{101} Marshall, Margaret, Superintendent. Letter to C. M. Wooster. January 14, 1926. (Files of California Department of Finance, Division of State Lands.)

\textsuperscript{102} California Department of Public Works, Division of Land Settlement. Report . . . September 1, 1922. \textit{op. cit.} p. 20.


Supplementary information from field investigation.
prunes or alfalfa. The appraisal made in 1929 revealed that less than a quarter of the farmers had alfalfa, and of these, many had very poor crops. The report listed some 30 orchards, but in almost every case they added little value to the farm and were described as poor. These losses were important, for census data of 1924 show that the enterprises which were later adversely affected were the source that year of $142,061, or 77 per cent of the receipts from all enterprises.

The most profitable type of farming left was double cropping with grain and beans, a practice now usual and fairly profitable. The deep-rooted crops were not completely eliminated; they were still grown by a few farmers more fortunately situated and were repeatedly planted by others. Some of the dairy enterprises survived, but often by the use of roughage feeds other than alfalfa. These feeds, however, required a much larger acreage per cow and hence produced a lower return per acre.

These changes seriously affected the settlers and the state. For the settlers to make a living with low-income crops much larger farms were required than had been provided. The land had been priced with the expectation that alfalfa and fruit could be grown; land suitable only for grain and beans was worth much less. Heavy investments had been made in crops and equipment which were no longer productive. In fact some settlers had shifted from dairying to fruit and were indebted for both enterprises when they were forced to turn to a third and much less intensive type of farming. Mr. R. V. Wright, an appraiser and specialist in farm management, described the situation as follows:

Regarding the size of farm units, I believe that unless many of the farms are united, there will not be a very stable and satisfactory economic situation in the colony, even with the best of a drainage and irrigation system.

In my opinion there should be no farms with less than forty acres, and with the heavier soils a much larger farm is needed. The investment in buildings and equipment is prohibitive on the small places, and without satisfactory buildings and equipment good farm management can not be practiced.

There is no reason to believe that the administration expected the settlers ever to be dependent on low-income crops. The proponents of the program were well aware that the area of land necessary to obtain a given income depends in considerable part upon the crop raised. For instance, Professor Thomas Forsyth Hunt, Dean of the College of Agriculture, pointed out in 1914 that the area needed to obtain a gross income of $4,000 varied from 20 acres with oranges, to 40 acres with potatoes, to 60 acres with alfalfa and a dairy, and to 200 acres with barley.

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103 Wright, E. V., Appraiser. [Report to California State Land Settlement Board.] February 27, 1929. (Typewritten; in files of California Department of Finance, Division of State Lands.)


105 Wright, R. V. Letter to C. W. Cleary, Chief of the Division of Land Settlement. February 27, 1929. (Files of California Department of Finance, Division of State Lands.)

106 Hunt, Thomas Forsyth, and other members of the staff. Some things the prospective settlers should know. op. cit. p. 1–63.

Also see: California Commission on Land Colonization and Rural Credits. Report . . . . op. cit. p. 79.
Causes of Crop Failures.—It is evident that the losses of alfalfa and prunes were the most serious events on the settlement. The question then arises of why the crops were lost and whether or not these might have been foreseen and prevented. Dieback is often assigned as the cause for losses in prune trees. The following statement summarizes the results of extensive studies of the problem by the California Agricultural Experiment Station.

In 1921 the attention of the California Agricultural Experiment Station was called to a development of scorch of the foliage (dieback) of Agen prune trees in the upper Sacramento Valley. The area affected became larger as new orchards came into bearing, and now the trouble seriously threatens some 15,000 acres of trees located in Butte, Tehama, and Glenn Counties. Detailed studies in the field and in the laboratories of the plant nutrition and pomology divisions have been carried on since 1926 and it is fairly well established that faulty potassium nutrition of these prune trees is an important factor in the development of the trouble.\(^{107}\)

The same faulty potassium nutrition has been observed in alfalfa. Other diseases are also common with this crop.

Another major difficulty with both crops was poor drainage. Almost the entire area of good soil was subject to flood and to a high water table. The water table, moreover, was fluctuating. While shallow-rooted crops were occasionally flooded out, deep-rooted crops were seriously damaged. Poor drainage has always been emphasized by the settlers as a cause for their losses because deep-rooted crops were the ones that died. The following paragraphs by different authorities describe the situation:

This land has apparently filled up with water which can not now get away..... A considerable part of the area is going into the winter with a water table within 6 or 8 feet of the surface, in some places nearer, and this means that 15 or 20 inches of rain is all that will be necessary to completely saturate the land.\(^{108}\)

The general drainage conditions at Durham, I find to be very much more serious than anticipated. The majority of the acreage has the water table at such a height as to be a menace to vegetation and in many cases absolutely prohibitive to fruit trees, the depth to ground water varying from 2 feet to 7 feet in all places where data were available. The soils vary considerably throughout the colony, most of them however, being very heavy, which fact greatly retards percolation of water and makes proper drainage a very difficult process. The open ditch system, so far as developed at present, is rather unsatisfactory due to the fact that the slow percolation thru the soil limits the effectiveness of any drain to a narrow strip of land adjoining.\(^{109}\)

The Durham State Land Settlement....is badly waterlogged.

Prior to 1918 only a small portion of the land which now constitutes the State Land Settlement at Durham had been graded and very little of it was irrigated. The land was used chiefly for grain raising, and was in very near its natural condition as to topography and irrigation. The land was crossed by many sloughs and gullies and there is no record of any need for drainage, all excess water being carried off by natural drains. There are reports of severe floods at various times in intervals of several years but these floods were of very short duration and the land soon drained off showing no ill effect from the excess water. After the land


\(^{108}\) Weir, W. W., Drainage Engineer in the Experiment Station. Letter to Mrs. Margaret McRae, Superintendent at Durham. November 24, 1926. (Files of California Department of Finance, Division of State Lands.)

\(^{109}\) Smith, J. Winter, Engineer and Superintendent at Delhi. Letter to C. M. Wooster, Chairman of the Board. March 10, 1927. (Files of California Department of Finance, Division of State Lands.)
had been subdivided and the settlers came onto the ground, things were decidedly changed; all of the farms were graded so as to facilitate irrigating. The natural drainage courses were filled in if they happened to cut through the middle of a man’s farm and no channels were excavated to take their place. An irrigation system was also installed. In laying out this project no regard was given the natural drainage, where it was necessary for the irrigation canals to cross a slough or small gulch the drain was filled in and the canal built across it. In some cases check gates were built across the natural drainage channels such as Robber's Gulch and these channels were converted into irrigation canals. In other cases irrigation canals were built so deep as to be almost adequate for drainage canals, but in these deep canals headgates were placed and during certain seasons of the year water was headed up in these canals to considerable heights. The canals which might have served to drain the land were now forcing water back into the land and causing it to become waterlogged.

After complete settlement of the Colony the land had all been leveled and was so graded that the only existing natural drains, of the many original ones, were Hamlin Slough, Robber's Gulch, and the lower end of Turtle Slough. Of these drains, Hamlin is on the eastern extremity and drains only the pasture land and the heavy adobe soils. Robber's Gulch was obstructed by numerous headgate structures and converted into an irrigation canal and the remaining part of Turtle Slough was crossed by two or three bridges or culverts wholly inadequate to allow the passing of the winter flow in this channel. This slough was also allowed to become overgrown with weeds, thus greatly reducing its capacity.

Doubtless the poor farming conditions due to lack of drainage in the Durham Colony would be greatly lessened if the natural drainage channels had been left unmolested or if they were to be reopened.110

Regarding the drainage and irrigation situation, I have assumed that it will be necessary to line several irrigation ditches with concrete and deepen some of the existing drain channels and build additional drain ditches. The cost of such improvements would in my judgement not exceed $50 per acre. This would provide an adequate irrigation and drainage system for the entire colony. If and when such a system is established, the land values would automatically rise $50 per acre. Hence I have depreciated the land values approximately $50 per acre due to the lack of such a system at this time.111

It should be noted that in places the bed of Butte Creek was above the level of the surrounding land and consequently did not provide direct drainage from the settlement. The sloughs that drained the land led through the tract and joined the creek farther down. In early days Butte Creek had often over­flowed its banks and had completely changed its course several times, but levees were built along the creek and this overflow was prevented. The chief flood difficulties afterward came from storm waters from surrounding territory that drained onto the settlement land. When floods occurred, Butte Creek would also be filled, and the water could not escape rapidly.

The engineers in general agreed that the excess water was caused by waste in the application of irrigation water to the land, by seepage losses from irrigation ditches and Butte Creek, by obstruction of natural drainage ways, and by saturation of the soil with rainfall during the winter months. One man mentioned that the extensive growing of rice in the region to the south retarded the lateral movement of underground water. There was no unanimity, however, in the solutions proposed. They ranged from very expensive tile drainage to relatively simple ditching. One scheme would have cost $200,000, or $60 an acre, on the better soils. It is not known, of course, whether any method would

110 Baxter, W. S. A report on the drainage of the Durham State Land Settlement. (A type-writtten thesis prepared at the University of California College of Civil Engineering, May, 1929.)
111 Wright, E. V. Letter to C. W. Cleary. February 27, 1929. (Files of California Department of Finance, Division of State Lands.)
have been successful, at least from an economic viewpoint. Nothing that might have been adequate was attempted. When money was available the officers lined irrigation ditches where seepage was particularly bad and installed or improved drainage tile and ditches.

Mr. Wright, who made the 1929 appraisal for the state, described the situation as follows:

Regarding the crop adaptability of the better soils on the colony, I have considered that the following crops may be grown successfully: alfalfa, beans, corn, sudan, wheat, barley, oats and other general farm crops common to this part of the state. Fruit crops may do well under certain conditions and in a few places but as a general thing for the colony, I would say that fruit crops are very doubtful and too speculative for the settlers to deal with. The difficulty that many of the settlers have had in reseeding alfalfa is very puzzling. It is a known fact that alfalfa has been grown successfully on the colony for a long period of years, even before the colony was established. I firmly believe that with the proper soil management and drainage that alfalfa may again be successfully and generally grown in the colony. Perhaps some of the essential plant foods have become locked up, so that they are not readily available for the roots, if so it will require some treatment that will liberate these elements.

Whether dieback or poor drainage was more important was immaterial from the standpoint of the success of the settlements. It seems likely that if either could have been corrected, the other would have prevented any very marked improvement.

On the other hand, when consideration is given to the possibility of correction and particularly to the possibility of anticipating the difficulties, the two problems are very different. Dieback was not known at the time the Durham land was purchased, and there was no reason for anticipating it. The same statement cannot be made concerning poor drainage. The official report made to the Board before the land was purchased contained recommendations that some work be done to provide outlet drains for these floods. The statement, in part, was as follows:

Inquiries regarding overflow and drainage conditions made at the time of this examination do not entirely justify the precautions mentioned in this report but because of the evidence of drift, scattered about the fields, marks on fences and buildings, evidently made by high water, remnants of old levees and the numerous and extensive provisions that both the Northern Electric and the Southern Pacific have made for passing storm water, it is believed by the writer that the problem often assumes a rather serious nature. Intermittent overflow lasting probably only a few hours would not seriously interfere with the type of agriculture carried on at present but should this tract be subdivided and thickly settled, overflow would become quite serious.

Mr. Weir, who made the report, recommended that some $35,500 be spent for drains in order to prevent damage from winter floods. He emphasized that it was impossible to forecast how serious the problem might be. In February, 1919, the rainfall was heavy, and Mr. Kreutzer, recognizing the hazard involved, called in Mr. Weir and Mr. Williams to consider what should be done.

112 Wright, R. V. Letter to C. W. Cleary, February 27, 1929. (Files of California Department of Finance, Division of State Lands.)

113 It must be noted that while these factors still cause serious losses on the settlements, many settlers who are growing crops adapted to the soils and who have good farm organizations are doing well.

114 Weir, W. W., Drainage Engineer in the Experiment Station. [Report on drainage conditions on Stanford Tract.] December, 1917. (Typewritten; in files of W. W. Weir.)

115 Kreutzer, Geo. C. Letter to Milo Williams. March 6, 1919. (Files of California Department of Finance, Division of State Lands.)
They recommended some extensive work, and there is good reason to believe that some money was allocated for the purpose. The funds, however, were evidently diverted to Delhi.\textsuperscript{114} No important drainage system was ever developed.

**DELLHI PRODUCTION PROBLEMS**

*Early Production Problems.*—At Delhi, the early experience was very different from that at Durham. It was described by the Board as follows:

As soon as the land was purchased the work of preparing for spring planting began. A large force of men were employed in leveling and checking land for alfalfa, in leveling land for vineyard planting, and in setting out vines. Three hundred and six acres were leveled and checked, and about one-half the acreage was planted to alfalfa. One hundred seventy acres were set out in vineyard.

Due to unusually strong winds in the spring of 1920, much damage was done to the land that had been prepared for irrigation. The work had started so late that it was impossible to take the ordinary precautions against wind damage, such as the planting of rye strips. Water was furnished to the land that had been seeded to alfalfa and had been planted to vines, through slip joint pipe in order to carry the plantings through until the regular irrigation system was completed. The showing that the alfalfa and vines made during the early spring indicated that the irrigation was efficient but wind damage was too great to overcome. No provision had been made against damage by rabbits, so that in a number of the vineyards the young shoots were eaten off by this pest. Rabbit wire was later put around one of the vineyards, but the vineyard had already suffered.\textsuperscript{117}

While the danger from wind was reduced by handling only 1 to 5 acres at a time so that the crop may be growing before the wind rises (the growing crop will serve to break the wind and hold the soil in place), by planting rye strips to catch the wind and drift, and by diskinc in manure and straw to bind the soil,\textsuperscript{118} many crops continued to be lost. Bamboo windbreaks were sometimes planted but they in turn became a pest. Blowing from adjacent vacant farms could never be stopped, and there were many such farms. This was particularly bad if the land had been broken but not put into crop. Some observers have claimed that farms should not have been sold except in solid blocks at one time so no such vacancies would have occurred. With sales as slow as they were, however, it is not clear that any different procedure from that followed was possible if settlers were to be allowed freedom of choice.

At first even where the alfalfa was not blown out by the wind, the crop was poor. This difficulty was corrected for a time by the application of sulfur and of ground limestone and sulfur, and by June, 1922, 1,369 acres had been planted to alfalfa along with 347 acres in trees, 343 acres in vines, and 100 acres in sweet potatoes.\textsuperscript{119} At the end of three years some 2,000 acres were in alfalfa with a reported average yield of 4½ tons per acre. A few fields were producing 6 to 10 tons. With this feed available, a promising dairy industry was started.

\textsuperscript{114}"The Land Settlement Board desires to have a re-allocation of the million dollar appropriation. Some of the money allotted to Durham and Berkeley will not be needed, while there is urgent need for all of it at Delhi. I should like, therefore, to have $20,000 taken from the $108,000 allocated to Durham for loans, and to have the $30,000 allocated to Durham and not used, made available for use at Delhi and to have $15,000 taken from the allocation to the Berkeley office and also credited to the Delhi fund." (Mead, Elwood. Letter to State Board of Control. September 17, 1920. Files of California Department of Finance, Division of State Lands.)

\textsuperscript{117}California State Land Settlement Board. Report . . . . September 30, 1920. op. cit. p. 34.

\textsuperscript{118}California Department of Public Works, Division of Land Settlement. Report . . . . September 1, 1922. op. cit. p. 42.

\textsuperscript{119}Ibid. p. 41.
To encourage this development of dairies, the United States Department of Agriculture stationed one of their men, Mr. C. V. Castle, at Delhi. High-producing grade or purebred Holstein cows and first-class purebred Holstein sires were brought in. The state and local banks furnished the settlers with credit so that shortly a number of farmers had some promising dairy enterprises under way. There were 211 grade cows and 32 purebred cows on the settlement in the summer of 1922. In July of that year, 115 of them had an average milk-fat production of 39.75 pounds. While that fall the State Department of Agriculture found 29 tubercular reactors, which had to be disposed of at a heavy loss, the dairy program continued to expand rapidly.\textsuperscript{120}

It must be noted that the settlement officers, university technicians, and trained personnel from other agencies gave a great deal of help in organizing farms and in supervising cultural and animal-husbandry practices. Talks and demonstrations were given, farms were visited at frequent intervals, crops were inspected, and records were kept.\textsuperscript{121} The most detailed records were kept for the Veterans Bureau trainees, for whom monthly budgets for two years in advance were set up.\textsuperscript{122} The superintendents at both settlements were chosen largely because of the technical aid they could give the settlers. Mr. Packard states that the supervision was extremely detailed. Undoubtedly, the settlers, if they wished, had every assistance.

The returns from production, however, were inadequate. In the first place the important enterprises required heavy investments with no returns to be expected for a number of years. This was particularly true of trees but was also true of vines and alfalfa. Any returns from the last were often reinvested in a dairy herd and equipment. Second, production was often very poor. Interplanting of trees and vines with cash crops, although advised, succeeded only at times. The settlers' experience with annual crops was such that on the whole they came to be considered a last resort. For most and perhaps all settlers it was impossible to meet interest, water, and principal payments and to make a living. As a result, delinquencies increased rapidly and the settlers demanded an adjustment of their debts. In 1925 this was granted with delinquencies eliminated and debts and interest rate reduced. The section on "Reorganization at Delhi" describes this adjustment in more detail.

\textit{Later Production Problems.}—After this adjustment at Delhi in 1925, there was much hope that the settlement would prosper. The settlers had been on their allotments from three to five years and had had time to bring them into production; even the peach orchards should soon have begun to bring some returns. If the settlement could ever have succeeded it would have done so at this time. Nevertheless, during the next five years, the settlement became an almost complete failure, and the state gave up most of its investment. While there were many causal factors operating, production problems became even more dominant than before. In fact most of the alfalfa and orchards died.

The extent of these failures can be partly seen in the statistics of crop acreages at Delhi (table 1). With some minor exceptions, the area covered by these figures is identical with that of the land-settlement tract. The figures for 1927 and 1928 had been previously copied from records of the settlement office and may include some items not usually counted. The figures for both alfalfa

\textsuperscript{120} \textit{Ibid.} p. 41. \textsuperscript{121} \textit{Ibid.} p. 45. \textsuperscript{122} Files of Giannini Foundation.
and trees were about 200 acres higher than other figures found. Crops not shown were minor and made no significant changes. Alfalfa reached its highest total of 2,400 acres in 1925, after which it declined to as low as 607 acres in 1931. Moreover, while in 1925 phenomenal yields were reported, in later years the yield was reported to be much less. The importance of this drop is reflected in the change in the dairy industry. New as it was in 1925, there were about 800 head of dairy cows and heifers in the settlement. In 1935, only three herds of any size were reported as being maintained. The acreage in trees reached its maximum of 1,491 acres in 1928, its minimum of 512 in 1932. The condition of part of this acreage in 1932 was reliably reported, moreover, as very poor.

### TABLE 1

**Crops Grown at Delhi, 1922–1934**

<table>
<thead>
<tr>
<th>Year</th>
<th>Alfalfa</th>
<th>Trees</th>
<th>Vines</th>
<th>Beans</th>
<th>Corn</th>
</tr>
</thead>
<tbody>
<tr>
<td>1922</td>
<td>1,300</td>
<td>374</td>
<td>347</td>
<td>......</td>
<td>......</td>
</tr>
<tr>
<td>1923</td>
<td>1,800</td>
<td>800</td>
<td>350</td>
<td>......</td>
<td>......</td>
</tr>
<tr>
<td>1924</td>
<td>......</td>
<td>......</td>
<td>......</td>
<td>......</td>
<td>......</td>
</tr>
<tr>
<td>1925</td>
<td>2,400</td>
<td>1,200</td>
<td>600</td>
<td>......</td>
<td>......</td>
</tr>
<tr>
<td>1926</td>
<td>......</td>
<td>......</td>
<td>......</td>
<td>......</td>
<td>......</td>
</tr>
<tr>
<td>1927</td>
<td>2,200</td>
<td>1,400</td>
<td>500</td>
<td>300</td>
<td>400</td>
</tr>
<tr>
<td>1928</td>
<td>2,200</td>
<td>1,400</td>
<td>500</td>
<td>300</td>
<td>400</td>
</tr>
<tr>
<td>1929</td>
<td>1,500</td>
<td>890</td>
<td>510</td>
<td>700</td>
<td>600</td>
</tr>
<tr>
<td>1930</td>
<td>673</td>
<td>762</td>
<td>398</td>
<td>1,193</td>
<td>358</td>
</tr>
<tr>
<td>1931</td>
<td>607</td>
<td>641</td>
<td>414</td>
<td>1,057</td>
<td>203</td>
</tr>
<tr>
<td>1932</td>
<td>807</td>
<td>512</td>
<td>422</td>
<td>1,489</td>
<td>1,032</td>
</tr>
<tr>
<td>1933</td>
<td>896</td>
<td>537</td>
<td>448</td>
<td>1,628</td>
<td>1,040</td>
</tr>
<tr>
<td>1934</td>
<td>904</td>
<td>574</td>
<td>494</td>
<td>1,613</td>
<td>1,039</td>
</tr>
</tbody>
</table>

Sources of data:
1922-1925: From the files of Delhi State Land Settlement Office.
1927-1934: From the office of the Turlock Irrigation District.

settlers, however, delayed pulling trees and plowing up alfalfa until an adjustment had been made with the state. Consequently a large total acreage was maintained longer than would otherwise have been the case. The acreage in vines made little change during these years. In 1927 beans and corn were unimportant but by 1932 they had become the two main crops in point of acreage.

The final situation at Delhi under state supervision is shown in an appraisal finished early in 1929. Table 2 shows the 1925 and 1929 valuations. It should be remembered that the 1925 valuations were considerably lower than the original contracts because the 1925 adjustment had provided for a 15 per cent reduction in the price of the land. In the 1929 appraisal, land was further reduced in value 56 per cent. The 1929 reduction in value of 80 per cent on trees and vines shows the seriousness of the production situation. The reduction of 31 per cent in the buildings was not to be unexpected for structures seven or eight years old; the heavy loss here was in poultry equipment. The largest absolute loss was in land. Some of the considerations in the appraisal at Delhi were as follows:

In making appraisals of the improved ranches we have arrived at values which an experienced farmer could afford to pay, and would be willing to pay, provided he desired to locate in the Delhi Colony.
In arriving at these conclusions we have taken into consideration the possible earning power of the lands under the management of an experienced farmer; the quality of the soil and its adaptability; the contour of the land and its location, the irrigation system, cost of water and time consumed in irrigating; the adequacy and inadequacy of the pipe line system; the general conditions of the community, economic and otherwise. We have also taken into consideration the demand for farm lands in this and other parts of the state, and the sale value thereof.

**TABLE 2**

<table>
<thead>
<tr>
<th>Item</th>
<th>50 laborers' allotments; average 2.03 acres</th>
<th>52 poultry farms; average 6.34 acres</th>
<th>130 farms; average 30.52 acres</th>
<th>All 232 allotments; average 18.96 acres</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Average valuation</td>
<td>Percentage shrinkage</td>
<td>Average valuation</td>
<td>Percentage shrinkage</td>
</tr>
<tr>
<td></td>
<td>dollars</td>
<td>per cent</td>
<td>dollars</td>
<td>per cent</td>
</tr>
<tr>
<td>Land (piped and graded):</td>
<td>1,925</td>
<td>34</td>
<td>775</td>
<td>27</td>
</tr>
<tr>
<td>1925 valuation</td>
<td>1,645</td>
<td>43</td>
<td>8,094</td>
<td>58</td>
</tr>
<tr>
<td>1929 valuation</td>
<td>2,320</td>
<td>56</td>
<td>2,230</td>
<td>56</td>
</tr>
<tr>
<td>Shrinkage</td>
<td></td>
<td></td>
<td>75</td>
<td>27</td>
</tr>
<tr>
<td>Trees and vines:</td>
<td>89</td>
<td>26</td>
<td>1,211</td>
<td>30</td>
</tr>
<tr>
<td>1925 valuation</td>
<td>221</td>
<td>43</td>
<td>747</td>
<td>33</td>
</tr>
<tr>
<td>1929 valuation</td>
<td>26</td>
<td>33</td>
<td>1,462</td>
<td>34</td>
</tr>
<tr>
<td>Shrinkage</td>
<td>77</td>
<td>27</td>
<td>195</td>
<td>35</td>
</tr>
<tr>
<td>Buildings:</td>
<td>905</td>
<td>35</td>
<td>1,404</td>
<td>35</td>
</tr>
<tr>
<td>1925 valuation</td>
<td>914</td>
<td>35</td>
<td>1,194</td>
<td>35</td>
</tr>
<tr>
<td>1929 valuation</td>
<td>490</td>
<td>35</td>
<td>507</td>
<td>30</td>
</tr>
<tr>
<td>Shrinkage</td>
<td>241</td>
<td>27</td>
<td>1,480</td>
<td>43</td>
</tr>
<tr>
<td>Total:</td>
<td>1,767</td>
<td>35</td>
<td>3,470</td>
<td>58</td>
</tr>
<tr>
<td>1925 valuation</td>
<td>1,189</td>
<td>35</td>
<td>4,805</td>
<td>58</td>
</tr>
<tr>
<td>1929 valuation</td>
<td>578</td>
<td>33</td>
<td>6,201</td>
<td>58</td>
</tr>
<tr>
<td>Shrinkage</td>
<td></td>
<td></td>
<td>58</td>
<td>35</td>
</tr>
</tbody>
</table>

Source of data: Files of the State Land Settlement Office at Delhi.

We have not taken into consideration the cost of the pipe line, as in some cases the cost of the pipe line would exceed our appraised value of the land. The pipe lines are a part of the land, and a part of the irrigation system, and should not be added to our appraised value.

... we find many peach orchards badly diseased and a great number of them are being pulled out by reason thereof. Therefore, we have only allowed enhancement upon such orchards where we were satisfied that they were comparatively free from disease and showed fairly good production.

... there are very few good pieces of alfalfa in the colony.

In placing a value on building improvements we have figured the present cost of reproduction and allowed the usual depreciation, at the same time taking into consideration the present condition of the buildings.

On a great many of the allotments in the Delhi Colony there have been large sums of money spent for chicken houses and equipment connected therewith, and numerous poultry men have gone out of the poultry business and apparently do not intend to re-engage in such business. On these ranches the buildings are vacant and unoccupied and going to wreck and ruin, and such buildings are of no particular value to the ranch under the present method of operation. In appraising these buildings we have taken this factor into consideration.
Generally we have allowed an enhancement on Thompson Seedless Vines where it would not increase the value of the entire ranch beyond the prospective sale value, as the soil conditions generally seem to be adapted for the growing of this fruit.\textsuperscript{128}

As a result of these production problems the settlers had to resort to annual crops of relatively small income-producing possibilities. This change was disastrous, since it was difficult to make even a living with beans and corn on the small farms of 20 to 30 acres, to say nothing of paying off heavy debts. The latter had to be reduced or the settlers would lose their homes.

The causes of these crop losses were physical and biological. The alfalfa failed to continue to produce a good stand or growth and soon died out. Soil deficiencies, diseases such as bacterial wilt, and nematodes, all played a part. The chief difficulty with the peach trees seemed to be little-leaf, although nematodes again were a factor. Cultural practices had little to do with the failures; the crops died regardless of the care given them.

Information Available in 1919 about Delhi.—The question that arises is how the Board came to purchase land subject to such serious production hazards. Why did men with access to the best advice buy the wrong sort of land on which to grow alfalfa and peaches? To answer the question a review is necessary of the information available to the Board at the time of purchase. This information included the 1917 report of their own investigators which, in part, was as follows:

The entire surface is largely wind-formed and possessed minor elevations, ridges and depressions characteristic of wind-formed soils....

Only one type of soil is present and that is a medium sand. The soil on the ridge crests and other elevated parts is usually somewhat coarser than that at lower levels. It is uniform to 6 feet or more in depth except for a few small intermittent spots containing thin layers of rather compact silty material at depths ranging from 3 to 6 feet below the surface. These compact layers resemble a feebly cemented hardpan in places and at times bear small calcareous nodules.

The sand in the depressions and other lower lying positions is a little more loamy and locally approaches a fine sand in texture. In these places the compact silty subsoil layers are more numerous and usually nearer the surface but they do not hinder the penetration of roots and water. In fact, they sometimes serve a beneficial purpose in checking the loss of water by percolation. The soil is loose and soft when dry and in the virgin state and tends to drift quite badly over exposed surfaces but when sown to crops and irrigated the surface packs quite firmly and is not affected by wind to any great extent. It is low in organic matter, absorbs water readily and is very easily tilled at all times of the year.

No alkali nor high water table is present in this tract, but the excessive use of water in the same kind of soil nearby has caused a rising of the water table in some of the depressions and an accumulation of small amounts of alkali.

The tract as a whole is very well drained and the soil retains moisture well.

Most of the land in the tract is still in the virgin state. That in use is utilized for rye, wheat, barley, and milo with low yields.

Under irrigation from 7 to 9 tons of alfalfa were produced per acre in 6 cuttings in part of Sec. 1 near Ballico. Here excellent pumpkins, sweet and Irish potatoes, melons, peaches, grapes, milo and other crops are produced.\textsuperscript{124}

This description fails to stress certain features that had received consideration in the soil surveys which the United States Department of Agriculture

\textsuperscript{128} Varner, J. E., and Wellington Brown. Appraisal report to State Land Settlement Board, February 1, 1929. (Files of State Land Settlement Office, Delhi, California.)

\textsuperscript{124} Wank, M. E., W. E. Packard, and C. F. Shaw. Report to State Land Settlement Board relative to Delhi Tract. 1917.] (Typewritten; in files of Giannini Foundation.)
had made of this area. The eastern part of the area had been included in the Merced soil survey made in 1914 and the remainder in the Modesto-Turlock soil survey made in 1908. Figure 4 is based on these two soil-survey maps. The tract purchased is outlined in heavy lines. The major canals are shown as they existed in 1919—the High Line Canal, Lateral No. 6, and the Delhi Ditch, all a part of the Turlock Irrigation System. The area east of the High Line Canal was above the Ditch and had not been covered by the Turlock System. Because of the topography, some land west of the Ditch was also above it or at least was so high and rolling that gravity irrigation was not feasible. Most of the tract was wind-blown and therefore rolling.

According to the soil survey of the Turlock-Modesto area (fig. 4) the tract was largely of Fresno sand. Such was the classification of the dune area shown on the map as occupying the major portion. Its outlines are, to a surprising extent, identical with those of parts of the tract, especially along the western and southern edges. The most important exceptions are in sections 5, 6, 7, 8, and 17 of the western part of the tract. These exceptions were under either the Lateral No. 6 or the Delhi Ditch and pieces of them were level enough so that already they were under irrigation. Fresno sand, with no dune formation, is shown in sections 34, 36, 1, and part of 2; Fresno sandy loam in sections 36, and

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1 near Ballico. The eastern part of the tract was mapped in the soil survey of the Merced area as Madera sand. Various loams appear between the Merced River and the southern edge of the tract.

The reconnaissance soil survey of 1915 is similar in many important respects. Although the dune area is not shown on the map, it is mentioned in the report. The Fresno sand of the Modesto-Turlock study is called Oakley and Fresno sands, undifferentiated. In sections 36 and 1, the soil called Fresno sandy loam in the Turlock-Modesto survey is called Fresno sandy loam, brown phase—only as additional detail in description. There are also some variations in the boundaries of these types. It should be noted that this survey states that, "In all cases the topography is favorable to agriculture."

The report to the Board and the reports of the soil surveys differ in two notable respects. First, according to the surveys the soil around Delhi, although resembling that of adjacent areas, differs in containing more sand and in having a rolling, irregular topography; in short, it has a sand-dune character. Because of this difference the land at Delhi could not be compared exactly with the adjacent land which was being irrigated and intensively cultivated.

This difference is illustrated by its history. Some of the sand-dune land had never been farmed satisfactorily. The farmers in that vicinity regarded the best as old, worn-out rye land, the poorest type that they ever cultivated. Occasionally a crop could be grown in the northeastern part, where the Fresno sandy loam or Madera sand predominates. Rental returns were low; contracts usually called for one fifth of the crop and returned about 50 cents an acre to the owner. In 1919 most of the land was assessed at $20 an acre, a little at $23, and a considerable amount as low as $12.

Irrigation had been found profitable on only a few isolated level places. In 1911 the town of Delhi was plotted and all the area under the Turlock High Line Canal was subdivided. Of the part sold, the assessor's records show that much came back to Mr. Wilson. Later the area around Ballico was subdivided but very little was sold to settlers. Altogether some 200 acres had been thus developed adjacent to Lateral No. 6 and the Delhi Ditch. Elsewhere settlers found it impractical to irrigate. Dr. Mead described the physical situation found there as follows:

Its lack of development and the price at which purchased was due to the sandy and broken character of the land making it difficult to prepare for irrigation and hard at the start to grow crops.

... the surface of this area is too undulating for transporting water in open ditches. Last season an irrigator who tried it had to employ three men to watch the ditch banks and prevent breaks while one man distributed the water.

Such information doubtless led the engineers after the purchase to change their plans for laterals from ditches to pipes. Certainly some marked differences existed between the Delhi tract and the near-by irrigated lands. This conclusion is borne out by the second notable difference between the report to the Board and the various soil surveys: the former does not mention the

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126 California Department of Public Works, Division of Land Settlement. Report.... September 1, 1922. op. cit. p. 40.
127 Files of Assessor's Office, Merced County, Merced, California.
Fresno sandy loam soil in the north-central part of the tract. There is considerable difference between this sandy loam and the prevalent sand of the tract. According to the mechanical analysis given in the soil surveys, the Fresno sandy loam contains less fine sand (26.8 per cent) and more silt (32.7 per cent) than the Fresno sand (41.1 per cent fine sand and 7.4 per cent silt). The structures of the two soils are also different. The sand is loose at the surface and does not compact after rains, whereas the sandy loam is sticky when wet, puddles easily, and forms a crust when dry. The Madera sand, being very similar to the Fresno sand, also differs from the sandy loam. The important point to this is that the report to the Board mentions excellent crops of alfalfa, potatoes, melons, peaches, grapes, and milo in part of section 1 near Ballico. All the evidence indicates that these crops were grown on Fresno sandy loam. Since this soil is shown by the survey reports to differ markedly from Fresno and Madera sands, the report to the Board regarding crops did not necessarily indicate what could be raised on the major portion of the tract.

Certain specific crop diseases and pests were found at Delhi and the question arises whether they were known in 1919. Nematodes, which seriously affected both peaches and alfalfa, were a widely known hazard. In 1911, Dr. E. A. Bessey of the United States Bureau of Plant Industry reported on the problem as follows:

The disease of plants known as root-knot, beaded root-knot, root-gall, eelworm disease, big-root, and probably under other names has been present in the United States for many years and has caused losses whose extent can not be calculated.\(^{129}\)

..... the root-knot is to be found ..... at many points in California.\(^{130}\)

Root-knot is essentially a disease of light soils. Wherever the soil is sandy or contains a fairly large proportion of sand, other conditions being favorable, the root-knot nematode may be expected to thrive when once introduced.\(^{131}\)

The subject was also covered in a Farmers' Bulletin of 1915,\(^{132}\) in which a list of “the more important highly susceptible plants” included alfalfa, Old World grapevine, and peach trees. As to control, the authors made the following statements:

In orchards, ..... no entirely satisfactory method of control has been worked out ..... Never plant an orchard on land that is not known to be nematode free. Do not plant infested nursery stock on either clean or infested soil.

The most satisfactory method of combating the nematode in fields not planted to perennial crops is by the cultivation of immune crops for a period of two to three years and by carefully killing all weeds and susceptible plants in which the nematode can live. ..... Starving the nematode by keeping the land free from all vegetation for two years is an effective control method, though often impracticable.\(^{133}\)

There is plenty of evidence that soil and plant specialists were generally aware of the nematode problem. Some of the studies made, moreover, applied directly to California crops, such as sugar beets and citrus, the latter having been studied by a member of the University staff.\(^{134}\) The California Commission

\(^{130}\) Ibid. p. 23.
\(^{131}\) Ibid. p. 41.
\(^{133}\) Ibid. p. 19.
of Horticulture reported on the problem in 1913, and alfalfa, grapes, and peaches were listed as susceptible to serious injury. "Young peach... are often killed outright by this pest if planted in a worm-infested soil." It reported further that:

In the United States the distribution is decidedly spotted and it is at present regarded as a serious pest, and a menace to agriculture in only a few rather definite localities, especially in irrigated regions, the most prominent of which is an irrigated, potato-growing district in Nevada, where the depredations of the pest threatened the industry. The fact that the eel-worm exists in so many places, doing little appreciable damage, is no criterion that all necessary care should not be exerted in checking any further distribution of the pest. *Heterodera* is a comparatively new-comer to our soils, and the maximum amount of injury which it is capable of inflicting has undoubtedly not been reached. Intensive farming and more thorough irrigation are two factors which, in creating a better environmental condition, are decidedly advantageous in increasing the number of worms which the soil may harbor.

This last statement indicates that while the root-knot nematode might very well have been considered a danger to areas such as Delhi, the character of the problem was not yet widely understood. This seems to be further indicated by the experience at Delhi where the nematodes were extremely harmful to peaches. They were also found in alfalfa, and in the 1920's evidently were regarded as an important cause of the failure of this crop. More recently, however, while nematodes are still regarded as a serious menace for older type peach rootstocks in sandy soil, alfalfa is reported as giving a profitable crop even when infested by the root-knot nematode.

The most important cause of alfalfa failure, according to the opinion of most observers, was bacterial wilt. This disease is caused by a bacterium which works from the soil into the plant. Its effect is severe because it often shortens the life of a stand one half or more. More seedings are required, poorer yields and quality are obtained, and a rotation with other and usually smaller-income crops is necessary. Authorities state that there is no really satisfactory means of controlling the disease. It was first found in California in 1925, close to the Delhi settlement, and consequently could not have been anticipated.

Peaches were injured not only by nematode but also by little-leaf. This was a known hazard, particularly in sandy soil. As early as 1911 the California Agricultural Experiment Station reported on the disease as it affected peach trees, as follows:

Always worst on lighter, drier soils, this feature showing itself by the more pronounced occurrence of the disease on trees standing in sandy streaks or slight elevations in the orchard.

The typical peach disease has been seen only in the San Joaquin Valley, in the most sandy regions.

The trees fail to leaf out properly in the spring and seem to become confused, so to speak, as to the season. Later in the summer the trees may bloom and leaves begin to appear, but

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186 Ibid. p. 737.
187 In recent years the development of nematode-resistant rootstock has largely corrected the problem for peach trees. (Philip, Guy L., and Luther D. Davis. *Peach and nectarine growing in California*. California Agr. Ext. Cir. 98:19. 1936.)
the tops usually die back nearly to the forks of the tree and sometimes the trees die entirely. . . .

. . . Every few years there is usually a season, especially in the southern part of the State, when deciduous trees are badly affected in such ways as these.140

In 1917 the disease was again reported on, this time in connection with grapevines. The reference is apt, however, in that, as the author of this report says, "... trees, such as peach, . . . . show similar symptoms."141 Moreover, it is now generally agreed that peach trees are much more seriously affected than are vines. The report is as follows:

"Little-leaf" is a disease of the vine, vying in seriousness with oidium and phylloxera. It is confined to sandy soil in the great valley south of Sacramento County. . . . In severe cases the vines die after a few years. Vines slightly affected set fruit imperfectly, and those badly affected bear little or nothing.

No parasite has been found connected with the disease, and the evidence seems to show that it is not infectious. Several species of trees are affected with similar symptoms when growing near or among affected vines, indicating that the disease is due to local conditions of soil, water, temperature, or other non-parasitic causes.

No effective method of treatment has been demonstrated. . . .142

Typical or serious cases of little-leaf have been noted only in sandy or sandy-loam soils. If one passes through an infected region, the disappearance of the disease with a change from sandy to clay soil is very noticeable.143

Thus little-leaf was a known hazard and was related to sandy soils. The people concerned with the appraisal, however, did not realize its importance. It turned out to be a very serious problem.144

AVAILABILITY OF LAND

In view of the experience at the two settlements a question may be raised as to why those particular tracts were purchased, and whether or not some other tracts might have proved more feasible. No real understanding of this is possible unless a review is made of the other available tracts.

The Board, in advertising for land, had in mind certain requirements. The tract was to be a compact unit large enough to merit the attention of a resident superintendent and suitable for irrigation development and intensive agriculture. In the purchase at Durham the plan was to develop a general livestock type of farming. The fruit later grown there was not in accordance with the original program. At Delhi, apparently, the community was to specialize in fruit raising.145 Just how definite these ideas on enterprises were cannot be determined, although some people claim that certain tracts were refused as not suitable for the type of farms desired. Also, when the Delhi tract was purchased it was considered best, from both the political and the demonstration viewpoints, to buy outside the Durham area.

The lands offered the Board for the first colony consisted of 40 separate

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142 Ibid. p. 397.
143 Ibid. p. 383.
144 In recent years the development of zinc sprays has largely corrected the problem. (Philp, Guy L., and Luther D. Davis. Peach and nectarine growing in California. op. cit. p. 45.)
tracts totaling 199,089 acres. For the second colony, 64 offers were made, totaling 515,547 acres. Most of these tracts, however, were unfit; many had little or no water; others had poor soils with alkali or hardpan. According to Professor Shaw, 6 tracts in the first group and 10 in the second could have been considered for purchase. Delhi and Durham, however, were preferred for a number of reasons. Faults in the water right or the cost of pumping or bringing in water excluded several. On one ranch near Fresno, for instance, not only did the water lift for pumping prove high but the supply was uncertain. For another tract at Hamilton City the price was $200 an acre, and the seller laid down the impossible condition that the Board buy a sugar-beet mill at the same time. A tract at Union Island otherwise desirable, was thought to be in danger from flood. Perhaps the most valuable land rejected was the Holland Tract which today is a rich sugar-beet area. At that time, however, the irrigation system was just being developed, there was no assurance of adequate drainage, and the Board considered that there was danger from flood. Some claimed that it did not appear to be a good fruit area, which was what the Board desired. At that time it seems to have been regarded by many as a rather risky proposition. Even now, one can only speculate how satisfactory it would be divided into 30-acre farms.

Since one or two of these areas have turned out to be very productive, the members of the Board have been subjected to severe criticism for their choice of Delhi. From the standpoint of present-day information it is easy to point out errors made in 1919. A judgment based upon the information presented to or available to the Board is much more difficult. In this light, the best of the rejected tracts do not appear so favorable as they do now, and the choice of Delhi appears to have been a reasonable one, if it is assumed, of course, that one of the tracts had to be purchased.

It is also commonly believed that the Durham choice was a very desirable one. A contrary view must be taken in view of the available information on production. Neither settlement has much choice over the other.

If the two tracts are regarded as poor choices, it must be emphasized that the other offerings also appear to have been poor, in spite of the fact that the Board canvassed the state thoroughly. Only one tract is known which they regarded as suitable but which was not for sale. It is sometimes said that the Board did not have sufficient funds to finance the purchase of the higher-priced lands. Quite the contrary seems to have been true. The Board invariably considered offering a larger down payment than was asked for. There is every reason to believe that the Board purchased what they thought were the best tracts available. It is a fact of great significance that although the proponents of land settlement had talked of millions of acres awaiting development (see p. 403 and 410), the experience of the Board indicated that there were few, if any, tracts that were suitable for their program of group settlement.

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146 Mead, Elwood, C. F. Shaw, R. L. Adams, and J. W. Gregg. Colonization and rural development in California, op. cit., p. 34.
147 It has been very difficult to discover the reasons for the rejection of the various tracts. There are marked differences of opinion among those acquainted with the selections.
148 This may seem to be at variance with later developments where large acreages have come into intensive production. While these developments are beyond the scope of this study, it is believed that either they have been of a size not suited to the Board's requirements or have been made possible by technical and economic changes. Further investigation is needed.
Indicative of this lack of land is the fact that in order to buy the tracts selected, the Board had to pay prices that yielded high profits to the sellers. Judge Lott had received his land as a fee from a client some fifty years before when it had little value. Mr. White, who negotiated the sale to the Board, had an option which called for $150,000 on this tract and on another tract of 400 acres. By this sale he received $15,000 in cash and the 400 acres free of debt. Altogether his profits were $40,000 to $50,000.149

Mr. Wilson had begun to buy his land about 1905, much of it for about $10 an acre.150 Even with the addition of taxes and the expenses of attempts at subdivision, he made a handsome profit in his sale at $92.50 an acre. The high price obtained was due to the speculative situation that prevailed in 1919. Everywhere land was bringing very high prices. The complicated nature of speculative values is shown by evidence that a few months before the sale, Mr. Wilson offered the area to a company for $75 an acre. Similar evidence reveals that he was being offered $100 an acre by an agency acting for a Japanese colony at the time he sold to the state.

The state had to pass these profits on to the settlers as costs which were among the most important they had to meet. The productive situation at Delhi, however, was so poor that even if the land had cost nothing the only effect would have been to reduce the capital losses sustained. Very nearly the same situation prevailed at Durham. The cost of the land purchased, while indicative of the lack of land, is secondary in importance to the fact that only poor land was available.

THE ECONOMIC SITUATION

During the period under survey, that is, 1917 to 1930, the national price structure underwent some important changes. World War I and the post-War boom lifted all prices to unprecedented heights. The subsequent depression brought prices in general nearer the pre-War level. During these changes, agricultural prices fluctuated more than other prices. The effects of this widespread economic situation on the California State Land Settlements may be grouped under four headings: construction costs; produce prices; land sales; and land prices.

CONSTRUCTION COSTS

Figure 5 shows some indexes of construction costs for the United States at the time when construction on the two tracts was decided upon, and during the periods of construction. These periods can be defined only roughly. Construction at Durham, though largely completed during 1918 and 1919, continued as needed or as the settlers could afford it. At Delhi, construction began in December, 1919, and was almost ended in the spring of 1923; it was heaviest from the summer of 1920 to the summer of 1922. The indexes, charting variations in farm wages, and in prices of lumber, cement, and building materials for other than house, indicate in general the changes that the Board and settlers encountered.

149 Furlong v. White. (1921) 51 Cal. App. 265. Appellate Records. Third District. Civil 2267. (See especially appellant’s opening brief, p. 1–28; and reply brief of respondents, Elwood Mead et al., as members of and constituting the State Land Settlement Board, p. 1–42.)

150 Wilson, Edgar M. Interview. December 8, 1934.
As these indexes are for the whole United States, they cannot be regarded as giving an entirely accurate picture of conditions in specific parts of California. The lumber index, for one thing, may be faulty; a lumber war throughout the San Joaquin Valley during this period is said to have lowered lumber prices there disproportionately. Wages in California may have been higher than elsewhere in the United States. Another circumstance that may affect conclusions drawn from figure 5 is that the wages were paid largely to the settlers themselves who often turned the money back into materials. High or low wages, consequently, merely affected the amount of money that would be used as wages and the amount that would be used as loans.

The data do, however, indicate price changes in a general way, and it is apparent that Durham was hard hit by rising prices for materials and labor, because they were much higher at the time of construction than when the land was purchased. The Board had to provide more money and the settlers incurred a considerably heavier debt than they had anticipated. Many settlers postponed construction but this delay may have increased costs as much as it lowered them, the amount depending on the time when construction was finally carried out.

This increase in construction costs at Durham, from the viewpoint of the Board, was more than compensated for by the situation at Delhi where the experience was just opposite. Prices for materials and labor were almost at their peak when the state purchased the land and estimates were made, and...
in most cases, they were lower when the heaviest construction was under way. Consequently the Board and the settlers did not require so much money as the initial price situation would have indicated. Since the amount of construction carried out at Delhi was several times greater than that at Durham, the total effect of price changes in materials and labor must have been favorable to the Board.

![Annual index numbers of farm prices in California, 1913–1931.](image)


**PRICES OF FARM PRODUCTS**

Figure 6 shows the index numbers of farm-produce prices in California during the period under consideration. At Durham during the first two years, changes in the price levels of farm produce made farming more profitable than usual.

The 1920 break in prices was expected to be only temporary and at first neither the settlers nor the administration realized how serious the situation would become. Many of the settlers at Delhi purchased after the drop in price but did not realize its significance. Those who had crops to sell felt the effect of the price fall immediately and beyond doubt a number of settlers, particularly at Durham, were seriously hurt by it.

The settlers at Delhi who planted raisin grapes were also hurt by the drop in prices. As previously mentioned (p. 431) Thompson Seedless grapes were productive. Even in this crop the Board found itself held responsible for serious losses because, with Prohibition established, it had advised the planting of raisin varieties in preference to wine varieties. The price drop, however, while very severe for raisins was relatively moderate for wine grapes. The
comparative price changes are shown in table 3. A couple of settlers, who had refused to take the administration’s advice and had planted wine varieties, received a much better price for their product. The influence of the drop in prices on the settlers' income, however, should not be overemphasized. In view of the production difficulties encountered at both colonies, it is clear that most of the farmers had little to sell at any price.

**TABLE 3**

<table>
<thead>
<tr>
<th>Year</th>
<th>Wine varieties</th>
<th>Raisin varieties</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Price per fresh ton</td>
<td>Index</td>
</tr>
<tr>
<td></td>
<td>dollars 1919-1921=100</td>
<td></td>
</tr>
<tr>
<td>1919</td>
<td>50</td>
<td>72</td>
</tr>
<tr>
<td>1920</td>
<td>75</td>
<td>109</td>
</tr>
<tr>
<td>1921</td>
<td>82</td>
<td>119</td>
</tr>
<tr>
<td>1922</td>
<td>65</td>
<td>94</td>
</tr>
<tr>
<td>1923</td>
<td>40</td>
<td>58</td>
</tr>
<tr>
<td>1924</td>
<td>63</td>
<td>91</td>
</tr>
<tr>
<td>1925</td>
<td>60</td>
<td>87</td>
</tr>
<tr>
<td>1926</td>
<td>45</td>
<td>65</td>
</tr>
<tr>
<td>1927</td>
<td>45</td>
<td>65</td>
</tr>
<tr>
<td>1928</td>
<td>25</td>
<td>36</td>
</tr>
<tr>
<td>1929</td>
<td>35</td>
<td>51</td>
</tr>
</tbody>
</table>

* Returns to growers for naked (unpacked) fruit delivered at growers' first delivery point.

Source of data:
Shear, S. W. Deciduous fruit statistics as of January, 1942. p. 68. Univ. of California Giannini Foundation. (Mimeo.)

**LAND SALES**

Although the Board had confidently expected a strong demand for farms, even the most energetic sales program failed to bring in settlers, and over one third of the land at Delhi was unsold. There appear to be two significant reasons for the almost complete breakdown of sales in the settlement: the national economic situation and the settlement production difficulties.

After the depression of the early twenties, there was a falling off of land sales throughout the United States and a revulsion from the “back-to-the-farm” movement of War and pre-War times. Although California was not so much affected by this trend as was the rest of the country, there is no doubt that this widespread situation was influential at Delhi. It not only slowed the inflow of applicants, but changed the attitude of the Legislature; agricultural development was no longer considered so important as it had been.

Figures available for California indicate, however, that this national situation was not so important in the failure of the Delhi sales program as was the production situation. For instance, the number of farms in Merced County, according to the 1930 Census, rose from 2,846 in 1920 to 3,722 in 1925 and 3,830 in 1930. The number of farms in Stanislaus County rose from 4,566 in 1920 to 5,177 in 1925 and 5,743 in 1930. The number of taxpayers in the Turlock Irrigation District became greater every year, increasing from 5,491 to
in 1920 to 7,029 in 1925. Since these figures refer to areas immediately adjacent to the Delhi tract, it seems reasonable to believe that the difference between land sales at Delhi and in the surrounding area was caused by local difficulties—namely, the production problems just described.

Figure 7 shows the annual index of value per acre of land in California as estimated by the United States Department of Agriculture from 1912 to 1932, and the index of estimated values when the tracts for the two settlements were contracted for by the Board. It shows, first, that land values during the period studied were much higher than the 1912–1914 level; second, that this particular land was bought while prices were rising, but before they reached their peak; third, and most important, that the index of prices at the time of the purchase was less than any succeeding index until after the state severed its connection with the settlements. Evidently the Board had a margin at all times as far as the general trend was concerned.

<table>
<thead>
<tr>
<th>Year</th>
<th>Butte County</th>
<th>Merced County</th>
<th>Stanislaus County</th>
</tr>
</thead>
<tbody>
<tr>
<td>1910</td>
<td>44.19</td>
<td>36.47</td>
<td>59.51</td>
</tr>
<tr>
<td>1920</td>
<td>102.04</td>
<td>77.77</td>
<td>128.55</td>
</tr>
<tr>
<td>1925</td>
<td>85.27</td>
<td>97.09</td>
<td>144.57</td>
</tr>
<tr>
<td>1930</td>
<td>77.96</td>
<td>82.01</td>
<td>126.45</td>
</tr>
</tbody>
</table>

Sources of data:
Variations in the value of land in the counties containing the settlements or immediately adjacent thereto, according to the United States Bureau of the Census, are shown in table 4. In Butte County values declined decidedly between 1920 and 1925, though not enough to wipe out the rise that had occurred after the Board bought the Durham land in 1918. In Merced and Stanislaus counties, where Delhi was situated, values rose considerably between 1920 and 1925, although most of the gain had been wiped out by 1930. Thus the census data, as well as the United States Department of Agriculture estimates, indicate that land prices in general were sustained during the period. There is little justification for any supposition that reduced land prices in areas near the settlements drew applicants away from Delhi. More important, the maintenance of land prices indicates that there was a continuing demand for land throughout the period under consideration and supports the conclusion that the failure of sales at Delhi was due largely to production difficulties there.

FINANCIAL PROBLEMS

Several means and sources were used in financing the settlements. For one thing the previous owners of the Stanford tract and of most of the Delhi tract asked for a down payment of only part of the purchase price. The settlers, particularly those at Durham, furnished an important part of the money needed. The Federal Land Bank gave considerable aid. Local banks and some other organizations added small amounts. The state, however, was the most important source. In 1917, $10,000 was appropriated for administrative purposes and $250,000 was set up as a revolving fund. In 1919, $1,000,000 was added to this fund, and in 1921 another $1,000,000 was added. All the evidence indicates that the Legislature during these years gave everything that the Board asked.

The general condition of purchase included a 5 per cent down payment on land and a 40 per cent down payment on improvements. Land and improvement loans were made at 5 per cent and on amortization contracts of thirty-six and a half years for land and twenty years for improvements. But, only a straight five-year loan was allowed on livestock and equipment, and cash was required for any expense incurred by the Board in planting crops. An exception to the time required was made on the Stanford tract. Since it had been purchased under a twenty-year contract the Board required a similar twenty-year contract from the settlers. The Board gave deeds to the Durham settlers. Because of the current rise in governmental expenditures and because of the local improvements, the settlers had to pay unexpectedly heavy taxes. This aroused some criticism from the settlement officers and to avoid a similar experience at Delhi they decided to give only contracts of purchase there. Consequently the state continued to hold legal title to the land and it was exempt from taxation.

The capital requirement for those going on farms was at first $1,500, later

152 California Statutes, 1919. Chap. 450.
153 California Statutes, 1921. Chap. 15 and Chap. 734.
154 California Statutes, 1919. Chap. 450, Sec. 18.
156 Ibid. p. 9.
$2,500, and again $1,500 in 1923. A down payment was all the capital that was required of those desiring laborers' allotments. These were very easy to purchase. The land cost from $120 to $780, and credit terms were the same as for farms. On an allotment costing $400 the required down payment was $20; one of the most successful men at Durham is said to have made a down payment by selling his watch.

FINANCING AT DURHAM

Capital Supplied by Settlers.—A fairly definite picture can be given of the capital possessed by settlers at Durham. Mr. Kreutzer, the superintendent, made a survey there in 1924, the record of which shows the status of 83 farmers, both as listed at the time of application and as corrected in 1924 for losses on land and on other assets owned outside the settlement. The average amount brought in by this group was $5,645. Besides their initial capital, the newly arrived settlers were able to earn some additional money by working on construction; several earned $1,000 or more in this way. Also, many purchased farms with growing crops on them; 11 settlers thus received an average of $534.51 over all costs of planting, harvesting, and threshing. On the whole, the settlers at Durham made an important contribution to the capital required. This amount, moreover, gives a very favorable impression of the character of the settlers there.

Financial Situation in 1924.—The general impression over the state during the early years was that the settlement at Durham was a success. This favorable impression was largely due to ignorance of the fact that many farmers were delinquent. From the very first, delinquency was common and as the years went by it became a greater and greater problem.

The year 1924 is chosen for a detailed description of the situation. There are a number of reasons for the choice: For one thing the original administration was in charge up to the summer of that year. Except on the adobe lands, and on a few other farms, crop losses do not seem to have become serious until about this time; consequently, poor yields cannot be held to be generally responsible for delinquency. Moreover, and of great importance, there are several reports available for that year. The state auditor made a detailed analysis. Mr. Kreutzer made an inventory of each farm. The 1925 Census of Agriculture covers this same year. In coöperation with the United States Bureau of the Census, the Bureau of Agricultural Economics and the Bureau of Public Roads Division of Irrigation obtained detailed data from settlement farms for a study of the economic limits of cost of water. These various sources provide an excellent picture of the situation.

The state auditor made a detailed financial report on the Durham settlement as of February 29, 1924. The total balance amounted to $805,493.01. The liability side had as its principal items a debt to Stanford University of

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155 Files of Giannini Foundation.
159 California State Land Settlement Board. Report ... June 30, 1918. op. cit. p. 11.
$225,525.37, a debt to the state of $398,821.74, and a surplus of $143,792.58. The assets included $5,403.14 in cash, $73,498.00 due and delinquent from settlers, $587,879.29 in unmatured claims against settlers, $21,004.01 due from Delhi, $73,947.83 as the value of unsold farm allotments, and $31,348.11 as the value of reserved lands.

The book surplus of $143,793.58 shown in this statement was largely a provision for future administrative costs. It was offset, however, by the fact that some assets were of doubtful value. The farm allotments unsold, valued at $73,947.83, consisted of 9 farms totaling 660.65 acres. The valuation of the land of 5 of these farms had been reduced from the original $49,577.02 to $37,286.40 because of the adobe soil. Although most of these farms were leased,

### TABLE 5

**NUMBER OF SETTLERS DELINQUENT AND NOT DELINQUENT AT DURHAM STATE LAND SETTLEMENT, BY SIZE OF ALLOTMENT, FEBRUARY 29, 1924**

<table>
<thead>
<tr>
<th>Size of allotment</th>
<th>Settlers not delinquent</th>
<th>Settlers delinquent</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>acres</strong></td>
<td><strong>number</strong></td>
<td><strong>number</strong></td>
</tr>
<tr>
<td>0-2.99...</td>
<td>20</td>
<td>7</td>
</tr>
<tr>
<td>3-14.99...</td>
<td>12</td>
<td>3</td>
</tr>
<tr>
<td>15-29.99...</td>
<td>11</td>
<td>16</td>
</tr>
<tr>
<td>30-64.99...</td>
<td>11</td>
<td>30</td>
</tr>
<tr>
<td>65 or over...</td>
<td>2</td>
<td>16</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>56</td>
<td>72</td>
</tr>
</tbody>
</table>

Source of data:
California Department of Finance, Division of Budgets and Accounts.
[Report on the Durham State Land Settlement as of February 29, 1924.]
(Typewritten.)

they were not repaying the investment the state had in them. The item of $21,004.01 due from Delhi was virtually worthless. The matured and unmatured claims against settlers were the important assets of the settlement and will be described in detail.

Throughout this analysis a delinquency of less than $15 will not be considered. There were several of them but they appeared to be so minor that their inclusion would tend to be misleading. Consequently the total of delinquencies studied in the following tables is not exactly the same as shown in the auditor’s report. Table 5 shows the number of delinquencies by size of allotments. The striking features here are that there were more farms delinquent than not delinquent and that delinquency was much less frequent on the smaller allotments than on the larger. Whereas on the smallest allotment, the proportion of nondelinquents to delinquents was 20 to 7, on the largest it was 2 to 16.

Table 6 shows the indebtedness of settlers at Durham by size of allotment and by delinquency. The greater delinquencies of the larger allotments are again emphasized. The groups having the largest delinquency also had the heaviest unmatured indebtedness. The settlers who were behind in their payments had an unmatured indebtedness of $450,636.48, or 76.7 per cent of the total unmatured amount due the state.
Elsewhere in this study (p. 425), it is emphasized that the farms were too small for profitable farming. This may seem to be contradictory to these details on the farmers’ debts at Durham. While no attempt has been made at a farm-management analysis of the settlement farms, the seeming contradiction seems to be largely due to the facts that the smaller farms were on better soils and that the men on smaller allotments had time to work elsewhere and thus add to their income.

**TABLE 6**

**INDEBTEDNESS OF SETTLERS AT DURHAM STATE LAND SETTLEMENT WHEN CLASSIFIED BY SIZE OF ALLOTMENT AND DELINQUENCY, FEBRUARY 29, 1924**

<table>
<thead>
<tr>
<th>Size of allotment</th>
<th>Settlers not delinquent, unmatured indebtedness</th>
<th>Settlers delinquent</th>
<th>Delinquent indebtedness</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>dollars</td>
<td>dollars</td>
<td>dollars</td>
</tr>
<tr>
<td>0–2.99 acres</td>
<td>10,372.50</td>
<td>4,692.02</td>
<td>332.89</td>
</tr>
<tr>
<td>3–14.99 acres</td>
<td>18,692.47</td>
<td>7,396.03</td>
<td>875.54</td>
</tr>
<tr>
<td>15–29.99 acres</td>
<td>35,536.95</td>
<td>81,625.37</td>
<td>15,277.64</td>
</tr>
<tr>
<td>30–64.99 acres</td>
<td>57,985.28</td>
<td>207,166.62</td>
<td>31,222.60</td>
</tr>
<tr>
<td>65 or over</td>
<td>14,655.50</td>
<td>149,756.44</td>
<td>25,603.54</td>
</tr>
</tbody>
</table>

Source of data: California Department of Finance, Division of Budgets and Accounts. [Report on the Durham State Land Settlement as of February 29, 1924.] (Typewritten.)

Table 7 shows the average delinquency and average semiannual payment due of delinquent settlers by size of allotment. The noticeable feature here is that the delinquency was usually three times the payment. Further detail on the amount of delinquency per farm is as follows:

<table>
<thead>
<tr>
<th>Delinquencies</th>
<th>Number of farms with delinquencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>$500–999</td>
<td>11</td>
</tr>
<tr>
<td>1,000–1,999</td>
<td>20</td>
</tr>
<tr>
<td>2,000–2,999</td>
<td>5</td>
</tr>
<tr>
<td>3,000 or over</td>
<td>2</td>
</tr>
</tbody>
</table>

The evidence seems conclusive that a large number of settlers were not making good and that a large proportion of the state’s assets were of questionable character.

The State Superintendent of Accounts, Mr. W. Schleip, had, however, a favorable impression of the settlement and summarized the situation as follows:

... the aggregate of original loans to settlers now transacting business with the State was $859,061.15; deferred installments due State are $587,879.29; payments due and delinquent are $73,498.00 and the settlers equity in land and improvements acting as security for advances is $198,283.86. This equity is further reduced by loans obtained from the Federal Farm Loan Bank at Berkeley secured by land and utilized to make payments to State in amount $83,407.14. The net equity of $114,876.72 is more than ample to secure the delinquencies. The State is further secured by the following facts, viz: 1. Loans on improvements were only 60 per cent of value of improvements. 2. An appraisal of unencumbered improvements owned by delinquent settlers values them at $140,705.00 and the State could legally loan thereon sixty per cent of appraised value or $84,423.00, or more than sufficient to wipe off the entire delinquency.161

161 California Department of Finance, Division of Budgets and Accounts. [Report on the Durham State Land Settlement as of February 29, 1924.] (Typewritten.)
The valuations which were accepted by the auditor and which were those given in Mr. Kreutzer’s appraisal were not, however, necessarily indicative of the real situation. For instance, the average valuation they accepted on 8 adobe farms was $21,345.31 as compared with the average debt of $13,622.84. Settlers’ equities ranged from $619 to $15,251; yet the farms were so unproductive that the state had already arranged to take them back. Clearly the state was going to suffer a heavy loss on these farms. Similar evidence was available on at least one farm on the north side of the settlement which the Federal Land Bank had taken over to satisfy a mortgage. Subsequent production experience when viewed in the light of these debts, due and delinquent, demonstrated that the state was going to take a loss on virtually the entire settlement area.

TABLE 7
AVERAGE DELINQUENCY AND AVERAGE SEMIANNUAL PAYMENT DUE OF DELINQUENT SETTLERS AT DURHAM STATE LAND SETTLEMENT, CLASSIFIED BY SIZE OF ALLOTMENT, FEBRUARY 29, 1924

<table>
<thead>
<tr>
<th>Size of allotment</th>
<th>Average delinquency</th>
<th>Average semiannual payment due</th>
</tr>
</thead>
<tbody>
<tr>
<td>acres</td>
<td>dollars</td>
<td>dollars</td>
</tr>
<tr>
<td>0-2.99</td>
<td>47.57</td>
<td>30.69</td>
</tr>
<tr>
<td>3-14.99</td>
<td>291.85</td>
<td>113.89</td>
</tr>
<tr>
<td>15-29.99</td>
<td>954.85</td>
<td>240.07</td>
</tr>
<tr>
<td>30-64.99</td>
<td>1,040.75</td>
<td>327.79</td>
</tr>
<tr>
<td>65 or over</td>
<td>1,600.22</td>
<td>459.89</td>
</tr>
</tbody>
</table>

Source of data:
California Department of Finance, Division of Budgets and Accounts.
[Report on the Durham State Land Settlement as of February 29, 1924.]
(Typewritten.)

Adequacy of Capital Supply at Durham.—A liberal supply of capital was available at least to 1920, and there is no evidence of a shortage for any purpose thought to be needed by the Board through the next few years. Certainly a considerable number of settlers planted upwards of 500 acres of fruit trees and brought them into production. One definite need, that of improved drainage, did develop, however, and lack of funds may be regarded as a factor in the failure to carry out a large-scale program.

In an earlier section (p. 429), it was pointed out that funds apparently were provided at one time for drainage at Durham but were shifted to Delhi. Another reason for there being a lack of credit for a drainage system at Durham was that there was no agreement between the Board and the settlers as to who should ultimately pay for the cost of installing the system. Reports indicate that both wanted something done but neither would assume the cost. While the Board, probably at any time within five years of settlement, seems to have had authority to make improvements, no provision seems to have been made by which it could pay for any contingency such as the drainage system. The price which had been set had not been high enough to meet the requirements so that the money had to be obtained either from the Legislature or from the settlers with their consent. The latter was never given. The original intention was to have the settlers organize a mutual water company and thus accept
responsibility for operation of the irrigation system. This they refused to do, and no means were available to force them to comply. At the very first a settlers' committee had been established to manage the system. As time went on this committee accepted less and less responsibility. The years went by with a continual quarrel between the settlers and the administration regarding what should be done about drainage and who should pay for it. The little money that was spent seems to have been diverted from payments due the state. That there was no generally accepted determination of whether the state or the settlers should pay for improvements of this nature was, no doubt, an element in the failure to develop an adequate drainage system.  

Some of the evidence of the intentions and powers of the Board is as follows:  

"The board shall .... lay out, and where necessary, construct roads, ditches, and drains for .... insuring the proper cultivation of the several farms and allotments." Also: "The board, prior to disposing of it to settlers, or at any time after such land has been disposed of, but not after the end of the fifth year from the commencement of the term of the settler's purchase contract, may .... make any .... improvement .... necessary to render the allotment habitable and productive in advance of or after settlement." (California Statutes, 1919. Chap. 450, Sec. 11.)  

"The selling prices of the several allotments .... shall be fixed by the board, .... and calculated to return to the state the original cost of the land, together with a sufficient sum added thereto to cover all expenses and costs of surveying, improving, subdividing, and selling such lands, including the payment of interest, and all costs of engineering, superintendence, and administration, including the cost of operating any works built directly chargeable to such land, .... and also such sum as shall be deemed necessary to meet unforeseen contingencies." (California Statutes, 1919. Chap. 450, Sec. 17.)  

"Until a mutual water company has been organized and the settlers belonging to said mutual water company have assumed control of the irrigation system, the State Land Settlement Board will operate the irrigation works at the Durham State Land Settlement and levy an annual charge." (California State Land Settlement Board. Minutes of the California State Land Settlement Board. October 12, 1918. Typewritten; in files of California Department of Finance, Division of State Lands. Sacramento, California.)  

"When 90% of the land has been disposed of to settlers, or earlier, at the option of the board, a mutual water company will be formed and shares of stock will be issued to settlers in proportion to the irrigable acreage of each allotment. The settlers, as owners of these shares, will operate the distribution system, beyond where water is taken from the canals of the Irrigation District, this system to include pumping plants and pipe lines. The actual cost of operating the mutual company will be borne by the settlers in proportion to the shares held, the cost of operating the pumping plants being made a part of the general expenses and spread over the entire area." (Notes by Dr. Mead on proposed publication: Farm allotments and farm laborers' allotments in the first and second units of Delhi State Land Settlement, September, 1920. Files of Giannini Foundation.)  

"Up to the beginning of 1931 the irrigation system at Durham was operated by the State through a committee of settlers. The original plan of Land Settlement seems to have included no provisions for turning over the irrigation system to the settlers although evidence exists that such was the intention. By operating the system for a number of years, the State became obligated morally if not also legally to continue such operation until some individual or organization willing to assume this responsibility could be found.  

"The year 1924 was one of deficient rainfall. Dissatisfaction resulted in connection with the operation of the irrigation system. The Land Settlement Board cooperated in drawing up By-laws for a Mutual Water Company but after a considerable amount of work had been done to organize such a company the opinion was given by the office of the Attorney General that under the Land Settlement Act, as it stood, such transfer could not legally be made. Nothing further came of this effort." (Bauer, O. W., Superintendent. Final report to Department of Agriculture Division of Land Settlement. 1931. Typewritten; in files of California Department of Finance, Division of State Lands.) Also see: Mead, Elwood. Letter to Milo Williams. September 2, 1920. (Files of State Land Settlement Office. Delhi, California.)
FINANCING AT DELHI

Capital Supplied by Delhi Settlers.—The most accurate information concerning the capital assets of Delhi settlers was obtained from the original application records of 258 settlers. Unfortunately the records were not complete and many of those available were of settlers who soon left. Also, moves were frequent so that no acceptable classification could be made of the size of holdings. No check could be made of the money received from the sale of property owned outside the settlements. However, the information has some value. The 258 settlers had total book assets of $1,065,100 at time of application. Approximately one third was in cash; one third was in land; and one third included automobiles, farm stock, machinery, bonds, cash value of life-insurance policies, notes, loans from relatives, estates in probate, and other similar items.

Assets other than cash were of doubtful value. While land was usually mentioned specifically and given a valuation, its realizable value was doubtful because the possibility of selling it at the price given was always open to question. Since land might be listed either at the owner’s equity or with liabilities against it, even its book value was often unknown. If encumbered with mortgages, as was often the case, it might be a liability. Unless sold for cash to be used on the settlement, it would be of no assistance in any case. Other possessions such as farm equipment, livestock, and household furniture were of substantial importance to those people who owned them. To illustrate the questionable value of the property of many settlers, two extreme situations may be mentioned. One man listed assets of $12,500, including $6,400 in notes and $3,000 in books. Since, however, he had $2,800 in cash, he was among the strongest settlers. Another man listed assets of $12,511, of which $10,000 was land. He valued 1,000 chickens at $2,000, his tractor at $511. He had no cash and had liabilities of $5,230.

Sixty-eight settlers had assets totaling less than $1,500 each. On the average each had $360 in cash. Most of this group moved onto laborers’ allotments although a number later took larger allotments. Many who did this lacked the means to make any significant contribution toward developing a farm, unless they earned it after making their application.

In contrast, each of a group of 23 had over $10,000 in total assets with an average of $16,623. Their average amount of cash, however, was only $2,591—not a considerable sum, since many of them purchased farms larger than the average. The main part of their assets was land; it averaged $10,159 in stated value. These few men were credited with more than one third of the total assets brought in by settlers. The remaining settlers, having total assets between $1,500 and $10,000 and numbering 167, had average total assets of $3,755, including $1,551 in cash. If this group is combined with the richer group of 23 settlers, the average cash assets are $1,677. This figure is probably typical of the group on the Delhi farms and poultry allotments and gives an average investment of about $70 an acre.

As at Durham, one source of capital was money or credits earned after application for an allotment. Many worked for the settlement administration,
some worked for outside concerns, and a few went back to former jobs while their families remained on the allotment. The veterans, of course, had their income from the government. The number of people who thus added to their incomes is not known, but in every case investigated at Delhi in which the settler had a comfortable living while developing his farm, he received aid from one of these sources. Another important aid for a settler was the method by which he received credit for work he did on his own allotment. This was often regarded as work done for the state and the settler was credited accordingly. This credit was then used as down payment for either the land or improvements. Building materials or other supplies were obtained on an accounts-receivable basis. While the settler was eventually charged for all items due the state, the initial financing was thus made easy. Just how frequently the procedure was required is impossible to discover, but it was evidently common.

These supplementary sources of income from jobs and credit for work on their own allotment are estimated to have raised the farmers’ average capital contribution to $100 an acre. The writer believes this figure is approximately correct.

The settlers, however, claimed that their investment was far greater than $100 an acre, and in 1928 estimated that they had put $900,000, or $200 an acre, in money and $1,500,000, or $300 an acre, in labor into the settlement, making a total of $500 an acre. It is possible that the estimate of money was correct. The Board’s report of September 1, 1922, states that the average capital of all 205 settlers then on the tract was $3,251. Those on farms would, of course, have had the larger share. Unfortunately, no details were given and it seems likely that this figure included not only cash but also property of doubtful realizable value.

By the end of 1924 the average debt of those on allotments of over 13 acres was $354 per acre. If the settlers’ estimate of their equity of $500 is accepted, the total investment in the Delhi farms as of that date was $850 per acre. If the writer’s estimate of $100 per acre as the settlers’ equity is accepted, the total investment was about $450.

Financial Developments.—Although both the state and the settlers provided large sums of money, resort was made to other sources. Early in 1921 a number of settlers borrowed money from the First National Bank of Turlock with Mr. Packard, as Superintendent, guaranteeing the loans. The loans usually were for the purchase of cows; the bank could take chattels as security because the state did not have a prior claim as it did on land. The reason given in applying for a loan was that the settlers needed their money at once in order to pay for their purchase, but the administration, in making a loan, required considerable time before the money would arrive from Sacramento.


165 Batterman, W. S. [Speech at Delhi, November 9, 1928.] In: Settlers’ executive meeting was held Friday night; propositions discussed. Delhi Record 5(41):4. November 16, 1928.

166 California Department of Public Works, Division of Land Settlement. Report... September 1, 1922. op. cit. p. 40.

167 California Department of Finance, Division of Budgets and Accounts. [Report on the Delhi State Land Settlement as of December 31, 1924.] (Typewritten.)

168 Packard, Walter E. Letter to L. T. Brown, First National Bank, Turlock, California. November 2, 1921. (Files of State Land Settlement Office. Delhi, California.)
Many loans, however, were not repaid immediately, and remained on the books for several years.\textsuperscript{169} An interesting reason for encouraging these loans was given by Dr. Mead as follows: "I think the bank will press him harder to meet payments than we would."\textsuperscript{170} The Board also made some effort to borrow from the War Finance Corporation\textsuperscript{171} and the Joint Stock Land Bank.\textsuperscript{172}

Loans from the Federal Land Bank were an important source of money at Delhi. They were made after the balance due Mr. Wilson had been paid off in the spring of 1922. Under the purchase contract he was to receive only part in cash and to hold a mortgage as security for the balance. In the spring of 1922 the Board offered to pay him the balance provided he would take back 361 acres of the poorest land at the purchase price.\textsuperscript{173} He agreed, and in this way they disposed of some very poor land. Another reason for the deal was to obtain more money for development.\textsuperscript{174} The general aspects of the plan were as follows: By eliminating the Wilson mortgage and by giving each settler a deed to his land to replace his purchase contract, the Board made it possible for the settlers to give a first mortgage to the bank. The state would hold a second deed of trust for its own investment.\textsuperscript{175} The Board hoped that they would be able to borrow some $500,000 in this way.\textsuperscript{176} Since the net amount due Mr. Wilson was about $260,000 this would give the Board about $240,000 to use for development. The organization of a farm-loan association was begun in March, 1922.\textsuperscript{177}

The Federal Land Bank evidently did not consider these loans as an ordinary type. The officers gave great weight to the fact that the state had initiated the settlements, had set up a permanent supervisory administration, and would be the holder of junior obligations of the settlers.\textsuperscript{178}

Moreover, the settlers did not like to have these loans made. For one thing the bank charged them 5\% per cent for its money while the state charged only 5 per cent.\textsuperscript{179} Also, they were given a deed to their land in order that the bank

\begin{itemize}
\item\textsuperscript{169} Whipple, F. B., First National Bank, Turlock, California. Letter to J. Winter Smith. June 9, 1925. (Files of State Land Settlement Office. Delhi, California.)
\item\textsuperscript{170} Mead, Elwood. Letter to Walter E. Packard. March 16, 1922. (Files of State Land Settlement Office. Delhi, California.)
\item\textsuperscript{171} Packard, Walter E. Letter to Elwood Mead. February 22, 1922. (Files of State Land Settlement Office. Delhi, California.)
\item\textsuperscript{172} Mead, Elwood. Letter to A. B. Fletcher, Director of Public Works, Sacramento, California. July 24, 1922. (Files of Giannini Foundation.)
\item\textsuperscript{173} Mead, Elwood. Letter to Mortimer Fleishhacker. April 3, 1922. (Files of Giannini Foundation.)
\item\textsuperscript{174} Smith, J. Winter. [Report to California Department of Agriculture, Division of Land Settlement. July 29, 1927.] (Typewritten; in files of California Department of Finance, Division of State Lands.)
\item\textsuperscript{175} Packard, Walter E. Letter to Frank English, Deputy Attorney General. San Francisco, California. September 25, 1922. (Files of Giannini Foundation.)
\item\textsuperscript{176} California Department of Finance, Division of Budgets and Accounts. [Report on the Delhi State Land Settlement as of December 31, 1924.] (Typewritten.)
\item\textsuperscript{177} Smith, J. Winter. [Report to California Department of Agriculture, Division of Land Settlement. July 29, 1927.] (Typewritten; in files of California Department of Finance, Division of State Lands.)
\end{itemize}
loan could be made, and thus their property was taxable, which was not the case when the state held title. Consequently, some settlers not only paid a higher interest rate than others but also paid land taxes, while the others were exempt. No little ill feeling was aroused over this situation. In fact, some settlers refused to apply for a Land Bank loan unless they were granted an additional loan by the state.

After the final payment to Mr. Wilson in March, 1922, and before any money was obtained from the Federal Land Bank, the settlement office had about $135,000 available from the 1921 legislative appropriation. This was expected to last until about July 1, 1922.\textsuperscript{180}

The administration estimated their needs for all development and loans after that date at about $650,000.\textsuperscript{181} They still had all development work to do on the fourth, or Ballico, unit, which included 8 laborers’ allotments and 97 farms. They had upwards of 45 allotments unsold on the other units. Only a half dozen of these were laborers’ allotments; most would require loans of considerable amount. (See p. 452.) The Board wanted some $200,000 from the bank between July 1 and December 31, 1922, but by the latter date only $110,011.01 had been received. Even with a temporary loan of $20,000 by the State Board of Control the total was short of their needs.\textsuperscript{182} The loans from the Federal Land Bank continued to be slow and the shortage rapidly grew more acute. On February 24, 1923, Mr. Packard described the situation as follows: “We have no funds in the treasury at all now, and claims are in Sacramento being held.”\textsuperscript{183}

On May 17, 1923, there was practically no cash, and unpaid bills totaling $73,458.11 were on file.\textsuperscript{184} In July, when loans had reached a total of $305,100, the bank stopped making more. The only exceptions were two which were made in 1924 and which were probably approved because of the security offered by the individual borrowers. One can only guess at the bank’s reasons for stopping these loans, but probably the delinquencies and changes in state-administration policies had much to do with it. Dr. Mead was away at the time. Mr. Packard states that the bank officials promised to consider more loans on Dr. Mead’s return but nothing was done.

Meanwhile with the November, 1922, election came the defeat of the $3,000,000 bond issue, which had been proposed by the 1921 Legislature and which had come close to being approved in the general election. Little campaigning had been done for or against the issue; but the general economy campaign of Friend W. Richardson, who was elected Governor, a strong campaign against some state public-utility-bond issues, and interest in a bond issue for an ex-servicemen’s farm-and-home-purchase plan, combined to defeat the measure. As for legislative appropriations, Dr. Mead stated shortly

\textsuperscript{180} Mead, Elwood. Letter to Mortimer Fleishhacker. April 3, 1922. (Files of Giannini Foundation.)

\textsuperscript{181} Mead, Elwood. Letter to R. T. Evans, Treasurer, Federal Land Bank, Berkeley, California. April 3, 1922. (Files of Giannini Foundation.)

\textsuperscript{182} California State Board of Control. Emergency Resolution No. 22. August 2, 1922. (Files of Giannini Foundation.)

\textsuperscript{183} Packard, Walter E. Letter to Elwood Mead. February 24, 1923. (Files of Giannini Foundation.)

\textsuperscript{184} California Department of Finance, Division of Budgets and Accounts. [Report on the Delhi State Land Settlement as of May 17, 1923.] (Typewritten.)
after the election that he expected no help from the Legislature in the coming session.185

A review of the 1922–23 winter construction period shows that the Division of Land Settlement obtained funds for only about half of the planned expenditures. During the same period the settlement administration lost its political support and realized that no new financial help could be expected from the Legislature for two years. The Federal Land Bank stopped all loans in July, 1923.

The State Land Settlement Office was supposed to have an income from interest and amortization payments but the settlers did not keep up their payments. According to the auditors' report, the amount due and delinquent from settlers on December 31, 1922, was $73,445.27 and amounts due on open account $49,150.11. Of the 239 land contracts, 222 were delinquent; of the 142 improvement contracts, 122 were delinquent; and there were accounts receivable from 205 settlers. The auditor commented as follows in regard to the situation:

A survey should be made with a view to determining the condition of affairs of each settler, his ability to make payments, the value of his allotment, whether properly developed and cared for, etc. This has not been done in the past. Greater effort should be made to collect from settlers. Appraisals should be made periodically of property under chattel mortgage to the settlement. This has not been done in the past. We respectfully recommend that a thorough investigation be made of the value of State Land Settlement as exemplified at Delhi, both from the viewpoint of the State of California and the present and prospective settlers.188

Conditions rapidly grew worse during 1923. By December 31 the amount due and delinquent from settlers was $128,157.11 and the amount due on open account was $58,662.94. Current liabilities were $26,773.66 and available cash was $7,651.53.187 Settlers and administration alike became thoroughly demoralized. The following descriptions by one of the engineers under Dr. Mead of the situation in the spring of 1924 are believed to be accurate.

95% of the settlers are delinquent in their payments.

Forty-eight land bank payments fall due today. Half of these cannot be met by individuals. There is less than $3,000.00 on hand with practically no income, and the prospect of realizing on collection very poor.

Collateral sold without our permission or previous knowledge. There is but one single outstanding instance where chattels are protected by insurance. 40 absentee settlers with building development in which State holds interest being neglected. 27 of these developed allotments are wholly unoccupied with alarming depreciation.188

185 Mead, Elwood. Letter to Walter B. Packard. February 28, 1923. (Files of Giannini Foundation.)
188 California Department of Finance, Division of Budgets and Accounts. [Report on the Delhi State Land Settlement as of December 31, 1923.] (Typewritten.)
187 California Department of Finance, Division of Budgets and Accounts. [Report on the Delhi State Land Settlement as of December 31, 1923.] (Typewritten.)
188 Cook, Max, Farmstead Engineer. Existing conditions Delhi administrative affairs, April 1, 1924. (Typewritten; in files of State Land Settlement Office. Delhi, California.)
Mr. Wooster, who succeeded Dr. Mead as chairman of the Board, made the following statement:

The original plan provided for the loaning of the State's money to settlers, secured by chattel mortgages, and 136 of such loans were made prior to 1924. Such loans run from three to five years with interest at 5%. Practically none of these obligations were paid. In most cases the security, consisting of hogs, chickens, horses, cows or implements, was sold, lost, destroyed or otherwise dissipated and no substitutions were made therefor. A check in 1924 developed that the security was much less than the amount owing the State. Collection by means of mortgaged security was impossible.¹⁸⁸

Funds were so short that spring that a complete shutdown of operations was threatened. The Board of Control was asked for an emergency loan but Governor Richardson at first refused to allow it; he felt the state was not justified in adding more money to that already lost. Only by an appeal on humanitarian grounds could he be persuaded to allow a $40,000 loan.¹⁹⁰ This, with loans from banks, permitted the settlement organization to operate until the Legislature met the following year. At that time $250,000 was appropriated¹⁹¹ to finish needed construction, provide for operating expense, pay Board of Control loans, and make additional loans up to $50,000.¹⁹²

Reasons for Shortage of Funds at Delhi.—It is evident that there was a severe shortage of capital at Delhi. The reasons for this shortage are four in number. The original and most important reason was the inadequate surveys and estimates of cost. The only record found of such estimates were those which related to the irrigation system and which have been discussed (p. 411). The engineers who made them, considered them inadequate at the time. Since estimates were inadequate the Board naturally failed to arrange for the proper amount of funds. Certainly the Board did not anticipate the expenditures required.¹⁹³ It might be reiterated that price changes in construction costs were favorable. (See p. 440–42.)

The second reason for a shortage of funds was the failure of the various sources to provide as much money as was wanted. The sources, however, cannot be held responsible for this situation. All the evidence indicates that the Legislature in 1917, 1919, and 1921 appropriated all the funds which the Board thought it would need. The bond issues could hardly have been depended on until they were approved. In particular, the Board knew at the time of the 1921 appropriation that no bond issues would be likely to be voted on until November, 1922. The Federal Land Bank also was not depended on originally at Delhi, otherwise the Board would have given the settlers deeds to their land rather than contracts of purchase. Considering the character of the land purchased, the sums made available seem to have been liberal.

The third reason for the lack was the nature of the crops planted; peaches, grapes, alfalfa, and dairies require heavy initial investments. Moreover, no important returns could be expected from peaches for about five years, from grapes for three years, and from alfalfa for one year. A dairy might bring

¹⁸⁸ Wooster, C. M. [Report to Governor Richardson.] December 31, 1925. (Typewritten; in files of C. M. Wooster.)
¹⁹¹ California Statutes, 1925. Chap. 205.
¹⁹³ See correspondence between the Berkeley, Delhi, and Sacramento offices.
immediate returns if the initial investment were heavy, but if this were kept down the returns might be considerably reduced by the need to expand. Annual crops, while frequently tried, brought such poor returns that they were considered a last resort. With low or no returns to be expected during the first years, the settlers required other financial assistance.

The fourth reason for the lack of funds was the poor crops. They discouraged additional settlers and reduced the loans made by banks. In the long run the poor yields prevented the settlers from obtaining a good income and thus from building up their allotments with that source.

Effect of Shortage of Funds on Development of Farms for Sale.—Construction and development came to a stop because of the shortage of funds. But from the standpoint of success of the settlements, this fact is of no importance. As shown in the discussion on selling land (p. 421–23), there were always farms for sale in the settlement. The failure to sell the land cannot be ascribed to lack of capital. Rather it was due to the national economic situation and to the production situation on the settlements. Sales came to a stop before funds ran out. The preparation of more land for sale would have been to no purpose.

Effect of Inadequacy of Funds on the Development of Farms Sold.—The statement is frequently made that the settlers failed for lack of capital to develop their farms. The most important evidence on this matter is the development which took place. In 1925 there were 2,400 acres of alfalfa; 1,200 acres of trees, well on the way to maturity; 600 acres of vines, mostly mature; and 800 head of cows and heifers on the settlement. This development would not have been possible if considerable capital had not been available. Further evidence is the fact that the settlers borrowed enough to make their debts average $354 an acre by the end of 1924 and invested $100 an acre of their own money. From what can be learned these amounts were enough to bring most places into production. This does not mean the settlers could withstand crop losses.

Some of the last settlers to purchase may have lacked funds. Reliable evidence has been found that this was true of a number who wanted to expand their dairies. In view of the credit obtainable from local banks, these cases cannot be regarded as very numerous. Mr. Packard, on February 28, 1923, stated: “We are taking a large number of people without funds enough to develop unless the State can continue to make loans.”

It may be pointed out, however, that settlers by that time had ceased to come; in fact not more than 30 had arrived during the preceding six months. (See p. 422.) Since the policy of the Board had been to get every farm into full production, and since all information indicated that this was fully carried out, there is good reason to believe that earlier settlers had progressed far enough by 1923 to keep going without any particularly large new loans.

At the time of his final report, February 8, 1924, Mr. Packard stated that: “Forty settlers have applications on file for loans.”

On May 1 of the same year Mr. Cook stated: “... there are applications for loans on file for between $20,000.00 and $25,000.00. They are all urgent.”

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104 Packard, Walter E. Letter to Elwood Mead. February 24, 1923. (Files of Giannini Foundation.)
105 Packard, Walter E. Report February 8, 1924. op. cit.
106 Cook, Max. Existing conditions Delhi administrative affairs, April 1, 1924. (Typewritten; in files of State Land Settlement Office. Delhi, California.)
According to Captain J. Winter Smith, who became superintendent at that time, the Board of Control loan of $40,000 was designed to take care of these cases. That this was very nearly sufficient was indicated by a statement by Mr. Packard in his final report.

If an advance of $50,000 could be made by the Board of Control, our difficulties would be at an end . . . . The income from settlers should certainly be sufficient to keep up all administration costs and loans to settlers.197

It seems likely that Mr. Packard referred here only to those settlers already established on the settlement. The general indication is that most of the settlers who needed to borrow money for development during these years were able to obtain considerable amounts.

It must also be pointed out that the settlers at Delhi were spared some important cash expenditures during these years. No taxes were paid on land owned by the state, and all sales made by contracts of purchase left the title residing in the state. This was true for everyone until 1923 when those who had borrowed from the Federal Land Bank, and had been given deeds in order to do so, had to pay taxes. These were smaller, however, than those paid by others in the community because the California Supreme Court held that taxes could be levied only on each settler's possessory right or equity.198 This reduction amounted to 48 per cent in 1926.199 All veterans in California were exempt on the first $1,000 assessed valuation of property. This often meant complete exemption.200

Of far greater importance than these tax exemptions was the fact that the state did not force the settlers to meet their payments. This left such income as was obtained to be used for going expenses, living, or development. Such payments as were made to the State Land Settlement Office were in part used for new loans. Mr. Packard reported that up to the time he left, "No interest . . . . [had] been paid to the state . . . . the money having been used in lieu of an added appropriation."201 By 1925 this amounted to $350,000.202 Other than the payments made to the Federal Land Bank and private banks, the settlement as a whole made no interest payments for all the money it borrowed.203

In view of the development that actually took place, the amounts invested, and the low payments made for taxes, interest, and amortization, the conclusion is reached that most of the settlers had sufficient capital to develop their farms properly.

Effect of Shortage of Capital on Morale.—The failure of the State Land Settlement Office to obtain larger amounts of capital for construction work and loans must be regarded as an important cause for the break in morale at Delhi in 1923. A large number of the settlers had literally lived off their construction jobs or their loans. With these gone they lost a principal source of

200 Wooster, C. M. [Report to Governor Richardson.] December 31, 1925. (Typewritten; in files of C. M. Wooster.)
income. With farms producing poorly or not at all, many were in serious difficulties. Some had to go elsewhere to seek a living, all had to restrict expenditures. This situation, however, must not be regarded as indicating that funds were inadequate for development of their allotments; rather it shows the poor farm income received by all settlers, established or new—an income which would not have been corrected by more loans.

**REORGANIZATION AT DELHI**

It seems clear that the settlers at both Delhi and Durham encountered difficulties so serious that success was very remote. These difficulties have been described, and while many more details might be added, it is believed that a comprehensive picture has been given. From the viewpoint of causes of failure there is little more to tell.

The problem now to be dealt with is that of who would bear the losses that were being incurred. This distinction of causes of failure from distribution of losses is designed: partly to emphasize that the losses at Delhi and Durham were due to physical and economic factors, largely beyond the power of the people concerned to correct; and partly to separate the factors which caused failure from the factors which influenced the distribution of losses. This separation is justified because the disputes that arose between various persons and groups, while including many allegations concerning the causes of failure, were important only as they affected their respective financial standings. From a social viewpoint, it is apparent that since the crops were not productive and since capital and effort could never find recompense, society stood to lose, regardless of which groups or individuals bore the burden and which went free. Success here refers to the settlement projects as a whole, not to any particular individuals or groups.

In discussing the disputes that arose between these individuals and groups, it must be emphasized that during the early years, the settlers displayed exemplary qualities; they worked hard, cooperated, and maintained a confident spirit. As difficulties multiplied, however, they became disappointed, then antagonistic, and finally wholly bent on forcing the state to rectify their "wrongs." This change of attitude, it must be understood, followed the discovery that returns were not going to be satisfactory. Production and economic difficulties occurred regardless of settler attitude and were causal factors; settler opposition was a result.

**The Development of Settler Discontent at Delhi.**—The first sign of organized discontent among the settlers appeared in the summer of 1922. A newly installed American Legion Post, in a report on the local situation, made a number of suggestions, among them the following:

If the legislature would amend the land settlement act, so that the settlers were given a longer time in which to get started without having to meet other than the initial payment, the project would be developed to the satisfaction of all financially.\(^{204}\)

In answer to this Mr. Packard wrote a letter to the Post Commander:

I am sure that you realize that the State could not enter an arrangement which would be unsafe from a financial standpoint, and that any modification made in the Act referring to

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\(^{204}\) Packard, Walter E. Letter to Post Commander, Delhi Post American Legion. August 17, 1922. [Contains excerpts from report.] (Files of State Land Settlement Office. Delhi, California.)
postponement of payments must conform to sound business practice. With this in mind, I feel that a public statement regarding changes in the Act relating to change in the payment plan, should either be withheld until the matter had been considered seriously by the legion after a careful investigation, or should be so put as to express an impression, which would be considered on its merits later.  

The report of the Post also declared:

It was the general consensus of opinion that a number of changes should be made in the contracts, policies of the Land Settlement Board, and the Land Settlement Act, for the benefit of the Settlement.

Mr. Packard's answer was as follows:

I do not wish to convey the idea that criticism is not desirable or needed, but it seems to me a public statement that a number of changes should be made in the contracts and policies of the Division of Land Settlement, and in the Act, should not be made before the questions involved have been carefully weighed by the Legion with a full presentation of all angles of the problem, and with a formal studied vote by the Legion after a report had been submitted by a committee of investigation. A hasty public statement may be misleading, and may cause misunderstanding and result in trouble.

From this early encounter, one or two important particulars can be gathered. Some of the settlers were making objections, especially about the difficulty of meeting payments. The settlement officials were well aware of this situation and, while avoiding a public dispute, asked for an investigation. They handled the problem so that no serious trouble grew out of it; the Post did not even make the investigation. In fact the Veterans Bureau was trying at this very time to send some of its men to Delhi and did settle some there later in the fall. Shortly before, moreover, on July 26, 1922, Mr. Elmer L. Sherrell, Chief of the Rehabilitation Division of the United States Veterans Bureau at San Francisco, stated in a letter to local supervisors: "The group of men who are now at Delhi we believe are well cared for and we cannot speak too highly of the project as it now stands." 

Difficulties rapidly developed, however, between the Veterans Bureau and the State Land Settlement Office. The trainees were not satisfied with their prospects. Early in 1923 Major Louis T. Grant of the Bureau told Dr. Mead in a conference that he no longer believed the trainees could succeed at Delhi and that withdrawal would be necessary. Later in April, Mr. Packard wrote Dr. Mead that the agreement with the Bureau should not be continued.

Early in 1923 the settlers presented what was apparently their first general demand for financial relief. The request was made by the directors of the Delhi Cooperative, representing, one may assume, a considerable proportion of the settlers. At the meeting the committee asked Dr. Mead to replace their delinquencies with short-term notes so that they would not be in a position to be foreclosed against at any time. This request was refused.

Shortly after this Dr. Mead left for Australia. He had been invited to conduct an investigation for the governments there. Later he visited Palestine and other countries and did not return until the end of the year. During his absence Mr. Kreutzer served in his place.

The next move of the settlers was to form a Settlers' Welfare League. Some
of the more discontented were elected officers. At a mass meeting in June the League adopted the following resolutions:

1. That money from federal loans should be applied on delinquencies which may occur.
2. That payments on the property be based on average crop production.
3. That the limit of borrowing be increased from $3,000 to $5,000.
4. That the present general committee for the settlers be made permanent.
5. That a court of appeals with powers of arbitration be created to handle settlers' problems.
6. That payments in excess of the semiannual payments may be applied to succeeding payments.
7. That the settlers support and cooperate with the present Land Settlement Board.

These ideas involved some important changes in the relations between the settlers and the Board. Although the State Land Settlement Office had made clear that Federal Land Bank loans were to replace a part of the state loans, many settlers argued that they should be used to cover delinquencies. The crop payments would have involved a complete new contract and the assumption of much more risk by the state. The proposition that a court of appeals be set up was pushed and caused some anxiety to settlers who had not joined the movement and who did not wish any group to have the right to study their relations with the office.

Late in July the officers of the San Francisco office of the Veterans Bureau appointed a commission to investigate conditions at Delhi. The commission came to the colony, established themselves in a garage without notifying the State Land Settlement Office of their intentions, and proceeded to hear testimony. According to available reports, the witnesses were very critical of the settlement administration. The committee drew up a report and presented it to Governor Richardson. He gave it to Mr. Packard and asked him for his comments. While the investigation led to no tangible results, it seemed to let loose a flood of discontent. From then on, the dissatisfied felt free to express themselves; more and more of the settlers became outspoken in their antagonism.

Administrative Reorganization.—Shortly after the investigation by the Veterans Bureau the settlers asked for a hearing before Governor Richardson. At first he avoided seeing them, evidently relying on the settlement officials, but by persistence they won his attention. He then appointed Mr. C. M. Wooster to a vacancy on the Board and turned the problem over to him.

When Governor Richardson started his term in January, 1923, he paid no attention to the land-settlement activity and left the entire administrative force in office. Also he approved all administrative changes in the law that Dr. Mead desired, including the abolition of the Division of Land Settlement and the restoration of the State Land Settlement Board as an independent organ-

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210 Sacramento Bee. June 23, 1922. (News article.)
212 The writer has not been able to obtain a copy of this report. However, see, “Record of a conference held at Delhi, California, on July 26th, 1923, between Walter Packard, Superintendent of the Division of Land Settlement at Delhi, and members of a commission detailed by Major L. T. Grant, Director of the 12th District of the United States Veterans Bureau to investigate conditions surrounding trainees of the Veterans Bureau located in this district.” (Files of Giannini Foundation.)
213 Packard, Walter E. [Letter containing “reply to the findings of the commission” to Governor F. W. Richardson.] October 20, 1923. (Files of Giannini Foundation.)
ization. If the Governor had intended to have any direct influence over the settlement activity, he would probably not have done this.

Under the former arrangement, important matters had to be approved by the Director of the Department of Public Works. Under the new arrangement Dr. Mead's approval was final. The Board constituted as in 1920, resumed its old functions. One vacancy existed, but Governor Richardson did not fill it until forced by the settlers to take action. His only adverse position was in regard to appropriations. Having won his election on an economy platform, he made many cuts in regular appropriations and would no doubt have vetoed further capital expenditures in land settlement if such a bill had been presented to him. Throughout most of 1923 he gave every support to Mr. Packard, particularly at the time of Veterans Bureau investigation. Though his whole political philosophy was doubtless opposed to the state land-settlement activity, he gave it no particular attention until after discontent and agitation satisfied him that some action was necessary.

Mr. Wooster, the new board member, was a veteran real-estate operator and had an intimate knowledge of private land settlements. He had previously opposed state land-settlement activity and predicted the failure of Delhi. Concerning his first visit to Delhi, however, Mr. Packard wrote to Dr. Mead:

While this statement indicates that some cooperation might have been expected among the administration members, the actuality was quite the opposite. Innumerable differences developed. While Mr. Packard was well aware of the problems involved, he had only a subordinate position, he had already lost the confidence of many settlers, and soon realized he had no support from his superiors. Dr. Mead was away. Mr. Kreutzer seemed unable to suggest any suitable action. Mr. Wooster had the confidence of the Governor and was looked to by the settlers as one who might help them, but he was only a board member and had no authority. Although matters rapidly grew worse no action was taken which might have alleviated the situation. Mr. Packard, however, maintained a spirit of confidence. His viewpoint was well expressed in a report to Dr. Mead on December 31, 1923. After reviewing the situation on construction, land sales, and finances, he continued as follows:

All of the outstanding bills will be paid by the last of January, provided our affairs proceed normally. This seems to be a creditable showing for a period admitted to be the most difficult period in any project, particularly when the settlement was being maliciously attacked from both within and without.

215 The director, Mr. Fletcher, seems to have followed Dr. Mead’s judgment, but the technical requirement was often irritating. (Correspondence in files of Giannini Foundation.)
216 Richardson, F. W. [Speech at Delhi, June 16, 1925.] In: Mass meeting celebration. Delhi Record 2(19) :1, June 18, 1925.
217 Wooster, C. M. Letter. April 6, 1922. (Files of Giannini Foundation.)
218 Packard, Walter E. Letter to Elwood Mead. November 5, 1923. (Files of Giannini Foundation.)
If the Land Bank will make further loans, as I am told they will after your return, we can proceed without further financial embarrassment as the 8,000 acres of land are paid for, the irrigation system—costing $500,000—in paid for and operating satisfactorily, the State holds contracts and accounts due and protected by sufficient margin, totaling over $1,300,000, in addition to land, buildings and equipment valued at over $1,000,000, leaving a safety margin, of approximately $250,000 as a protection to the State's investment.

The officers of the Welfare League have so demoralized the morale of the community that it will take vigorous action on the part of the administration to recover the spirit that formerly existed and which has been the motive force behind the development of the colony up to the present time. These men have constantly visited settlers and tried to discourage them, and have advertised the fact as widely as they could that settlers, were, in their opinion, not making it. It happens that all the officers of the League are men who came here with money and three officers have received over $5,000 from the state.

The claim is made that men have been allowed to come to Delhi without sufficient funds. Facts show, after analysis of financial statement, that in many cases the settler who came here with the least amount of money has made the most progress and has increased his assets materially during the past two or three years. In my opinion, 85 per cent of the settlers will succeed if the unfair and untrue attacks made by those men are stopped.

I believe that it was a mistake to postpone the foreclosure in Mr. [---]'s case as I feel that some demonstration of this kind is necessary in order to make the agitators realize that they have entered into a business contract with the State of California and must meet the terms of that contract.

Suggestions have been made that some of the service rendered by the State should be dispensed with. An analysis of the cost of all service rendered settlers, less the charges made for this service, shows a total of approximately $3. per acre. When the State has two million dollars involved in a project such as this, it is certainly good business practice to protect the State's margin by a service which makes for success. This service, of course, will be reduced as the need for it vanishes.

I feel that it would be a calamity to allow the Settlement to drift into an indifferent development where the State would lose and where the settlers would not realize the success which they can reasonably anticipate.

Dr. Mead returned about this time and immediately decided that foreclosure was necessary. This the Governor would not permit. His statement follows:

On Mead's return I asked for his opinion and he denounced most of the colonists as anarchists and recommended foreclosure and ouster. He told how he had proceeded against the colonists in Australia, levying on their stock and goods and forcing them out penniless and shorn. I told him firmly that such inhuman procedure would not be tolerated by me in California.

The Governor then appointed Mr. Wooster as chairman of the Board but asked Dr. Mead to serve as a member. This Dr. Mead refused to do, stating that he would be unable to work with Mr. Wooster. Governor Richardson replied, in part, as follows:

I do not believe in the policy of foreclosure and think these settlers must be dealt with gently. It certainly should be done in view of the fact that conditions were badly misrepresented to them in the first place, and that the management of the settlement has been conducted very inefficiently.

I had hoped that you would stay with the board and lend your services to the solution of this very difficult problem.

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219 Packard, Walter E. Letter to Elwood Mead. December 31, 1923. (Files of State Land Settlement Office. Delhi, California.)
220 Richardson, F. W. [Speech at Delhi, June 16, 1925.] In: Mass meeting celebration. Delhi Record 2(19) :1. June 18, 1925.
221 Mead, Elwood. Letter to F. W. Richardson. January 26, 1924. (Files of Giannini Foundation.)
222 Richardson, F. W. Letter to Elwood Mead. January 30, 1924. (Files of Giannini Foundation.)
Dr. Mead, by this time, had lost all influence with the settlers. Their extreme antagonism was shown shortly afterward when a group of men broke into Community Hall, cut a painting of Dr. Mead from its frame, and hung it in effigy above the road.

Mr. Packard resigned as superintendent in February and Captain J. Winter Smith was appointed to succeed him. He had had some experience in similar work and was well recommended. Mr. Kreutzer, at Durham, resigned that summer and was succeeded in time by the secretary of the Board, Miss Margaret Marshall.

The 1925 Adjustment.—Almost from the first, the Settlement Board under Mr. Wooster was committed to adjustment. That the Governor should favor a reduction in prices for settler farms was indicated by his statement on misrepresentation. To acquaint the Legislature with the situation, a committee of investigation was appointed early in 1925. After a visit to the colony, it reported as follows:

That the amount required each year to meet payments to the State, taxes, irrigation taxes and irrigation maintenance is about $33.49 per acre.

That a great part of the acreage has been planted to fruit, which will not produce for several years. That 38% of the farms have produced no income to date, and for those that have, the average has been $451.20 per farm or an average of about $17 an acre.

...The loans promised to settlers for use on their farms have not been made in many instances.

The project as a whole has been, and now is, a financial failure. The settlers were led to expect too much.

In a number of instances chattel mortgages were made by settlers to the Board securing loans made by the Board. Later the mortgaged chattels were sold by the mortgagers and the loans were not repaid to the Board.

Furthermore, in addition to the general expectation of more help than is economically sound or larger loans than was financially or legally proper, many of the settlers came to the colony with the distinct belief that the State would act as a sort of guardian angel or Santa Claus and "see them through" as they expressed it.

The final consideration of this problem has led your committee to recommend that the State of California should never enter into another land settlement scheme. 223

The views of the settlers are shown in an editorial in the Delhi Record, written by one of the settlers:

We had hopes, up to a few years ago, that the Delhi Cross Word Puzzle might be solved without needless and damaging publicity. And such would have been the case had those in charge of the project displayed even ordinary foresight. Any settler possessed of the average intelligence and a smattering of horse sense could and did see just a few months after the settlement got under way, to a start, as auspicious as any settlement could reasonably hope for, that the Mead plan would not answer here. Instead of immediately getting to the bottom of the trouble finding and eliminating the weak links, the father of the project permitted matters to take their natural course with the result that the sign "Bankrupt" might just as well have been placed over the entrance to the Land Settlement office and on the homes of most of the settlers. From the beginning it became apparent that settlers could not meet their payments. Then was the time to change the plan; to get the proper shoe to fit the foot or, to abandon the project. Definite action at that time would have eliminated all this useless publicity which has [hurt] and is hurting California.

223 California Legislature. [Joint Legislative Committee Investigating State Land Settlement at Delhi.] Report of Joint Committee. Journal of the Senate during the forty-sixth session of the Legislature of the State of California, 1925. p. 629–30. 1925. (The writer has never been able to find a stenographic record of this investigation, although the legislature ordered that a copy be filed in the archives.)
Instead, a course of subterfuge; of evasion; of rosy promises and glowing messages to the press was adopted. The growl they claim came only from disgruntled types that could not succeed anywhere. In fact, it was as much as your investment here was worth to mention things publicly or attempt a little sincere and well-meant criticism. Just what those in charge hoped to accomplish by such a course has always been a puzzle to us.

We have been equally puzzled to learn why the acreage here was purchased at peak prices. Certainly, there was no real need of rushing the thing thru. And, as we get it, the original idea was to people the project with ex-service men. Just as soon as the idea was sold to the legislature and, the flag waving dispensed with, the soldier plan was dropped. Not so long ago, Dr. Mead attempted to place the blame for the Colony's trouble on the ex-service men here. As a matter of fact, disabled veterans have paid more man for man into the project than the civilian settler. Many here have received vocational training and compensation thru the Veteran's Bureau and the State has profited thereby.

Any business man knows that it would be business suicide to purchase ruthlessly at peak prices. Yet, the State of California paid war time prices for this land and attempted to re-sell it at a price that is far beyond the purse of the average pioneer. This has much to do with the Colony's failure. Another bad feature was the high pressure method advocated by those in charge. Ranchers, old timers in the vicinity, used a different method. Instead of rushing a big acreage of fruit trees into a soil that fell short of the necessary fertility to mother them, and, then starve them to death for six years, until a hoped for crop materialized, your old timer played the game differently. He planted to alfalfa, procured cows, built up the soil gradually and eventually arrived at the fruit stage. It was a slow, tedious method but a reasonably sure one. And he did not pay exhorbitant [sic] prices for the land either.

The writer came here with nearly six thousand dollars. He was advised to plant fifteen acres of peach trees. In four years of outside work and putting every cent earned into the upkeep of these trees, he has learned that he should have possessed nearer sixteen thousand dollars than six. And the end is not yet. Everything that he contracted with the State to do for him was done in a slip shod manner. His place was graded in such a manner that irrigation was almost impossible and Dr. Mead, expert tho he might be, would have to apply the Einstein theory with reverse English to get water to run over the land. And this was but one of many setbacks received.

Costly mistakes, errors of judgment, commission and omission, were made by the so-called experts here. Add to this inefficiency, carelessness, and a broken morale thru living in chicken houses upon the advice of officials [who] built for themselves fine, stucco bungalows complete in every detail from breakfast nooks to open fire places. And you have another angle of the situation. Glaring mistakes of engineers and near engineers have complicated things. And for these mistakes and an extremely costly administration the settler is expected to pay. Why, at one stage of the proceedings, pedestrians had to be exceeding alert that they might evade being run down by cars bearing officials and others employed by the state. Any settler at this stage of the game, that was making a showing, was either working for the state, had a good outside job or, a rich father that contributed to the cause. They did not make it off their allotments and they are not making it today.

Engineering blunders have made irrigation costs extremely high. And the cost of the irrigation system adds to the ranchers' overhead. In brief, "Nero fiddling while Rome crackled had nothing on the system used here in the olden days."

As a direct consequence of all this, settlers have pulled out by the score leaving the savings of a lifetime in these drifting sands. Does anyone question the deplorable fact that these losers go back East with a story that gets gloomier at every telling and California shares more than its due of bad advertising as a result? This is one of the objectionable features of the Mead plan. For it has been proven time and again that the original settler, as a rule, loses out. The man that pioneered; paves the way; bears the hardships and risks all his all is not the man that eventually owns the land. It has proven so on every reclamation project; government or otherwise.

Governor Richardson’s recent telegraphic message to Secretary Work shows that his excellency realizes fully the white elephant left his administration as a legacy from the Mead faction. And we desire to compliment the Governor for daring to speak the truth. His message plainly showed he was a poor politician but a real he-man.

In a spirit of giving credit where credit is due we cannot honestly hand Elwood Mead any bouquets on the Delhi venture. Or his much touted plan. Land settlement is as old as Moses;
the original irrigation expert, and outside of the big one in Utah and a few others founded by one nationality, have proven failures.

But publicity goes a long way to make a man famous. One requisite a Mead superintendent must have; besides that human touch, that the celebrated Doctor preaches but, fails to practice here, is to be an able press agent. Articles lauding the project and its founder emanate from this source at regular intervals.

The more we see and hear of reclamation schemes the more we become convinced that Barnum should have raised the ante.

Altho the half of it has not been told we will have to stop for ten newspapers the size of the Record could be filled with the "Story of Delhi."

The editorial is an excellent illustration of the forcefulness with which the settlers presented their arguments and the skill with which they set administration against administration.

With the findings of the investigating committee before them and spurred on by the attitude of the Governor and pressure from the settlers, the Legislature quickly passed some relief measures. A $350,000 book appropriation was made to remit interest charged against the State Land Settlement Board for previous appropriations. This was the legal method of canceling the interest that the Board could not pay the state. The Legislature appropriated $250,000 to provide some badly needed cash. After considerable negotiation with the settlers, the Board was able to work out a formula for adjustment which was applicable in equal degree to every allotment. Under it the state agreed to accept 1 per cent interest on all land contracts for the following five years and to reduce the debt of the settlers. The reductions included one of 15 per cent on the land contracts and one of the interest compounded at 3 per cent on 30 per cent of the initial purchase price of land from the date of original contract to July 23, 1925. Also, settlers who had borrowed from the Federal Land Bank were allowed a reduction to an amount equal to the initial costs in connection with the Federal Land Bank loan, together with interest on that amount from the date of the loan, and an amount equal to the difference between the 51/2 per cent interest charged by the Federal Land Bank and the 5 per cent charged by the state. The state assumed, moreover, the Federal Land Bank loans and gave the settlers new purchase contracts for the amount due.

The average reduction of indebtedness of settlers on farms of over 13 acres was from $352.81 to $305.05 an acre. The average reduction for poultry farms, 3 to 13 acres in size, was from $369.85 to $341.03 an acre. The reductions are of the indebtedness of settlers and not necessarily of the allotments owned by them. A number of the settlers exchanged allotments and thus their new indebtedness applied to a new acreage. This was particularly true for the laborers' allotments where so many moves were made to allotments of higher value and thus higher indebtedness that no book reduction in debt per acre occurred. Their debt, after the adjustment, averaged $547.85 per acre.

Some settlers did not receive much help from the adjustment: 7 of these, including 1 on a laborers' allotment, 1 on a poultry-farm allotment, and 5 on
farm allotments, were so indebted that even after the adjustment they had no equity. The auditor described their situation as follows:

Seven settlers will have to be dispossessed at the earliest possible moment. . . . If the improvements owned by them could be sold immediately at full appraisal value, the state would suffer no loss. This is, of course, impossible and the necessary termination of the contracts leaves these unfortunate settlers out in the cold. They lose their cash investment and the labor of years. Only special emergency relief could grant compensation in these cases.229

Six others had such a small equity that they could stay on their farms only under special contracts.

The total loss sustained at this time by the state is not easy to determine. The state held 3,725 acres of land, or 44 per cent of the settlement area. By legislative enactment, a total of $350,000 had been written off the books. On September 30, 1925, the auditor announced a deficit of $72,164, which would probably never be paid or even materially reduced. The relief measures allowed the interest on land contracts held by the state to be 1 per cent. In turn the state paid the Federal Land Bank 5½ per cent on its loans. Thus the state was subsidizing the settlers heavily. The $250,000 appropriation was largely a relief measure, not an investment. The auditor estimated "a definite loss to the state due to land settlement activity exceeding $825,000."

The adjustment, no matter how expensive to the state or how inadequate to some individual settlers, immediately eliminated all delinquencies, reduced the settlers' debt materially, and lowered the interest rate on land contracts to 1 per cent. This gave many settlers new hope. Their feelings were expressed by the editor of the local paper as follows:

It is with gratification and joy that we learn, just as we go to press, that Governor Richardson has signed the four Delhi relief measures, thus bringing to a close a long fought and trying battle. The signing of these bills means much to this Colony. The energetic settler, the man who is in earnest and willing to sacrifice, can now succeed. But individual effort is just as essential now as before the bills were signed. The big point is in the knowledge that the State has now kept faith. We can now proceed with our development of our allotments; of our home and our community with the knowledge that we have more than even chance to ultimately succeed. To those who sacrificed so much to bring this relief about; we owe much. Their's [sic] was not an easy task but, rather, in many ways, a thankless one.

From now on let us make the best of the relief extended us. Let us cooperate in every possible way; live as neighbors and friends with the same problems and griefs should live, ever remembering that in helping each other we best help ourselves.

The world will soon forget the publicity we have had. From now and henceforth be a booster. With the proper spirit and right sort of advertising, we're due to surprise even ourselves with the strides we are to make towards success and a bigger, better and broader colony. Victory is ours—Let us not turn it into defeat.230

The old community spirit was revived for a time and everyone celebrated in a grand "jamboree," as they called it. Everybody came in some substitute of an early pioneer wagon drawn by horses, mules, cows, or whatever else was available. Some fifty of these wound their way out over the sand dunes, were attacked by "Indians," but managed to reach the river flats where a great picnic was enjoyed by all, settlers and state officers alike.

229 California Department of Finance, Division of Budgets and Accounts. [Report on the Delhi State Land Settlement as of July 24, 1925.] (Typewritten.)
FINAL ADJUSTMENT BETWEEN THE SETTLERS AND THE STATE

The improved feeling which followed the 1925 adjustment at Delhi was short-lived. As has been described, each year brought more production problems and the economic condition continued to be discouraging. On June 30, 1927, the total amount due and delinquent from settlers at Delhi was $62,541.74, and at Durham was $110,666.22. Agitation grew stronger each year for another adjustment of debts, this time at both settlements.

Mr. C. C. Young became Governor in 1927. His first step was to reorganize the settlement administration. The Legislature reduced the Board to three in number consisting of the Director of Agriculture, the Director of Public Works, and the State Engineer. A Division of Land Settlement was established in the Department of Agriculture. The Governor appointed Mr. C. W. Cleary as chief of this division. Captain J. Winter Smith was retained as superintendent at Delhi but Mr. O. W. Bauer was appointed to succeed Miss Marshall as superintendent at Durham.

In order to obtain a better picture of the settlements the Governor appointed a citizens' committee to investigate. They reported as follows:

We find that land settlement under the State auspices and direction from its inception was a mistaken theory. . . . we earnestly recommend that no other or further attempt be made in that direction.

While the attitude of the new administration is not entirely clear, it seems evident that almost from the start the Governor and his advisors determined to withdraw the state from settlement activity. Necessary legislation, however, was not passed until 1929. This legislation included an appropriation of $185,000 to complete payment on the Stanford contract at Durham, a $150,000 appropriation to pay readjustment expenses, and the acts authorizing adjustment credits. The 1931 Legislature abolished the State Land Settlement Board and the Division of Land Settlement and turned such credits as remained over to the Division of State Lands in the Department of Finance.

The enactment of legislation, however, was the simplest part of the task. An agreement had to be worked out with every settler, no easy task, for almost every settler had real or imagined claims against the state and was in a position to make his demands effective. The purpose of this section is to describe the factors which led the state to relieve the settlers of most of their debts and thus assume the losses involved.
COLLECTION POLICY

Tables 8 and 9 show the development of delinquencies at the two settlements. The accounts receivable can be regarded as transferable in part to the deferred status and in part to the delinquent status. Some of the figures for amounts due the Federal Land Bank are approximations. The decrease in delinquencies at Delhi after December 31, 1924, was due to special extension notes which Mr. Wooster substituted for the delinquencies. These notes, along with the Federal Land Bank loans, delinquencies, and accounts receivable were accumulated and adjusted into one item on July 24, 1925. The important information contained in these tables is that the settlers became more and more involved in debts, due and delinquent.

These delinquencies raise the question as to what policy the various administrations followed regarding collections. An early indication of a policy and a difficulty is revealed in the June 30, 1918, statement of the Durham settlement. Although the first sales of land had been made in that month, past-due items had already appeared on the books. On the initial payments of 5 settlers’ land contracts, $1,059.15 was due; on the initial payments on 3 improvement contracts, $1,203.00. At Delhi, also, delinquencies were, from the first, allowed to stand on the books. The first settler’s contract was signed on May 26, 1920. The trial balance of June 30, 1920, shows $3,947.93 as due on settlers’ contracts, which in total amounted to $178,400.29. These delinquencies involved

TABLE 8

SUMMARY OF SETTLERS’ INDEBTEDNESS AT DURHAM FROM 1918 TO 1928

<table>
<thead>
<tr>
<th>Date</th>
<th>Indebtedness to state</th>
<th>Indebtedness to Federal Land Bank</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total contract indebtedness</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Deferred</td>
<td>Delinquent</td>
</tr>
<tr>
<td>---------------------</td>
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<td>------------</td>
</tr>
<tr>
<td>1. June 30, 1918</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>337,571.12</td>
<td>2,262.15</td>
</tr>
<tr>
<td>2. June 30, 1919</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>600,021.60</td>
<td>15,454.24</td>
</tr>
<tr>
<td>3. June 30, 1920</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. June 30, 1921</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. June 30, 1922</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. June 30, 1923</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. February 29, 1924</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. August 31, 1925</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. August 1, 1927</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. October 31, 1928</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Sources of data:
- Indebtedness to state:
  - Line 1: California State Land Settlement Board. Report... June 30, 1918. op. cit. p. 17.
  - Lines 2, 7, 8, and 10: California Department of Finance, Division of Budgets and Accounts. Report... (as of date given). (Typewritten.)
  - Line 4 and 6: Files of Giannini Foundation.
  - Line 5: California Department of Public Works, Division of Land Settlement. Report... September 1, 1922. op. cit. p. 34.
- Indebtedness to Federal Land Bank:
  - Files of Division of State Lands. Sacramento, California. (Incomplete.)

- California State Land Settlement Board. Report... June 30, 1918. op. cit. p. 20–21.
13 of the 45 settlers.\(^{240}\) The items were all due as down payments. Although, according to the law, the contracts were not delivered until the required down payment had been made in full, settlers learned early that an item "amount due" on the books did not affect their status and that money for development was still available.

Throughout the years under survey the collection policy was uniformly lax. Statements were issued threatening foreclosure, settlers were billed and called on by officials, policies were discussed, but no strong consistent action was ever taken.

**TABLE 9**

**SUMMARY OF SETTLERS’ INDEBTEDNESS AT DELHI FROM 1920 TO 1928**

<table>
<thead>
<tr>
<th>Date</th>
<th>Indebtedness to state</th>
<th>Indebtedness to Federal Land Bank</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total contract indebtedness</td>
<td>Accounts receivable</td>
</tr>
<tr>
<td></td>
<td>Deferred</td>
<td>Delinquent</td>
</tr>
<tr>
<td>1. June 30, 1920</td>
<td>178,400.29</td>
<td>3,497.93</td>
</tr>
<tr>
<td>2. June 30, 1922</td>
<td>920,024.93</td>
<td>47,488.19</td>
</tr>
<tr>
<td>3. December 31, 1923</td>
<td>1,071,402.13</td>
<td>73,445.27</td>
</tr>
<tr>
<td>4. December 31, 1923</td>
<td>1,147,077.12</td>
<td>128,157.11</td>
</tr>
<tr>
<td>5. December 31, 1924</td>
<td>1,193,651.23</td>
<td>226,001.42</td>
</tr>
<tr>
<td>6. December 31, 1925</td>
<td>1,233,176.13</td>
<td>88,360.57</td>
</tr>
<tr>
<td>7. July 24, 1925</td>
<td>1,438,069.79</td>
<td></td>
</tr>
<tr>
<td>8. June 30, 1926</td>
<td>1,353,031.52</td>
<td>38,628.01</td>
</tr>
<tr>
<td>9. August 1, 1927</td>
<td>1,275,641.21</td>
<td>45,817.52</td>
</tr>
<tr>
<td>10. June 30, 1928</td>
<td>1,232,896.56</td>
<td>80,466.71</td>
</tr>
</tbody>
</table>

Sources of data:

Indebtedness to state:


Lines 3-8, 10: California Department of Finance, Division of Budgets and Accounts. Report . . . (as of date given). (Typewritten.)


Indebtedness to Federal Land Bank:

Files of State Land Settlement Office. Delhi, California. (Incomplete.)

One of the earliest attempts made to encourage payment was the circularization among the settlers at Durham of a letter written by Dr. Mead to Mr. Kreutzer:

Durham is being discussed in every state in the Union and it is the greatest single influence in favor of the movement for the reconstruction of farm life in this country.

Whether it will continue to exercise this influence will not depend on anything the State may do . . . . The State is simply a big brother which gives them [the settlers] a somewhat better chance than they would have working alone, but the influence of the settlement is going to depend entirely on what the settlers, individually and as a community do. And the thing that needs to be done now above all other things is to have every settler make his payment when the six months installment comes due. As you know, I am talking soldier settlement from Florida to Maine . . . . If I can say that every settler at Durham, of the original colony has paid his first installment, it will do more to carry conviction into the minds of those vitally interested, but a little afraid, than days of talk that will omit that fact.\(^{241}\)


\(^{241}\) Mead, Elwood. Letter to G. C. Kreutzer. December 11, 1918. (Files of California Department of Finance, Division of State Lands.)
From the very first some of the settlers were loath to pay even if they had the means. While talking over a delinquency with one farmer at Delhi, Dr. Mead noticed the man's automobile and remarked that its sale would pay off the delinquency and that its upkeep would take care of future payments on the farm. The man had a team to take his family to town, and the post office and grocery store were only half a mile away. The farmer, with no hesitation, replied that if it were a matter of keeping the car or the farm, he would keep the car. The administration accepted his statement and did nothing. During these early years quitclaim deeds were given or cancellations made, but always after compromise or after abandonment of the farm by the settler. The only foreclosure proceedings pushed through in these first years at Durham seems to have been due to pressure by the Federal Land Bank, which held a first mortgage. It is significant that year after year a number of men on laborers' allotments were just one year behind in their payments. This failure to make collections resulted in part from a definite policy, described by Mr. Kreutzer as follows:

The delinquencies are not an absolute indication of their true condition. Practically all have assets far in excess of the amounts owing. The act provided and anticipated that loans would be made to settlers to help them develop their farms. We have held those loans down to a minimum. In fact many of the delinquencies as shown were brought about because the settler used his income to develop the farm rather than to borrow. If we should extend the full lending privilege to these delinquents they would be reduced by at least 50 in number. I feel it is not a good thing to do as debts that are due will be paid sooner than debts that are not due. Such due debts keep them from making costly purchases of equipment or other things which, while needed, they can well get on without during these times.242

Mr. Packard in his final report stated:

The policy has been to advise a settler to get his farm onto a paying basis as rapidly as possible even if this necessitated a delinquency to the State, because ... the contracts of purchase must ultimately be met from income from the land.243

These statements in conjunction with the cases studied reveal that the primary objective of the financial policies followed was to get every settler possible onto a producing farm.

In some cases it appears that delinquency may have been allowed to develop because of the neighborly and friendly ties that developed between the settlers and local officials. This was perhaps inevitable when consideration is given to the many phases of farm, home, and community life in which the two groups worked together and which aided in developing close friendships. It is apparent in certain cases that the officers in charge did not collect as well as was possible.244

Closely allied with this situation was the desire to avoid unfavorable publicity. This desire is understandable, for nothing could be more disheartening or antagonizing to settlers, established or prospective, than foreclosure or ejection proceedings against neighbors.

The only time that strict collection seems to have been seriously considered

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242 Kreutzer, G. C. Letter to C. M. Wooster, December 12, 1923. (Files of C. M. Wooster.) Also see statement by G. C. Kreutzer in: California Department of Finance, Division of Budgets and Accounts. [Report on Durham State Land Settlement as of February 29, 1924.] (Typewritten.)

243 Packard, Walter E. [Report ... February 8, 1924.] op. cit.

244 Supporting information is confidential.
Action was prevented by Governor Richardson. One can only conjecture what results might have been obtained had Dr. Mead’s suggestion been followed. Succeeding administrations made no material change in the collection policy. Immediately after assuming office, Mr. Wooster issued the following statement:

The policy of the state land board will be to go through with the contracts at Delhi Colony as originally made. The board is convinced that the colony is a going concern and will eventually prove a success. But the board intends to inject business methods and put the colony on a strict business basis. The board expects all colonists to live up to their contracts as originally made.

Any settler in the colony who shows a disposition to make good will receive all the consideration and help possible from the land settlement board. But those who do not try to make good and are agitating in an attempt to discredit the colony are expected to make their payments promptly, or their ranches will be foreclosed and sold to other people who will make good.

This quotation indicates a more stringent control than Dr. Mead had followed; and most settlers and observers at Durham had an impression that Mr. Wooster brought greater pressure to bear there than had the previous administration. In fact one farm was foreclosed. In the main, however, little distinction can be made between the collection policies of the two administrations.

The administration under Governor Young seems also to have followed substantially the same policy. They may have been more liberal, for they seem to have agreed at first to postponement of payments in a great number of cases. Certainly their assumption of control appears to have been followed by a drop in collections. Their views, however, were outlined by the new chief, Mr. Cleary, as follows:

.... any settler honestly endeavoring to meet his obligations, need not fear loss of any opportunity to continue with the purchase of his allotment, while those where evidence shows that they can pay and do not, will receive such consideration as is due them under the circumstances.

The situation regarding collections at this time is shown by some data for Delhi. On an acreage basis the payments on farms during 1927 averaged about $6 and during 1928 about $2. These payments may be compared with the average yearly rental paid from 1925 to 1928 of $8.30 per acre obtained by the Board on 11 similar farms which they had taken back and rented. It must be remembered that it was at this time the settlers came to full realization that they were going to lose most of their alfalfa and orchards. The improvement in spirits at Delhi which followed the 1925 adjustment was now gone. The settlers at Durham were also losing their important crops. The drop in collections at this time probably was very largely due to production difficulties.

An integral part of the collection policy was the adjustment policy adopted for settlers who wished to leave. The outstanding cases were those on the adobe land at Durham. While very meager information has been obtained about these adjustments, it seems evident that as soon as the administration realized

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245 Files of State Land Settlement Office. Delhi, California.
247 Files of California Department of Finance, Division of State Lands.
that the land would not produce as had been anticipated and that the settlers could not succeed, arrangements were made by which the settlers would suffer little loss and yet could continue farming on their better land. Some settlers at Delhi who were found to be undesirable were given an opportunity to make similar adjustments; some, in fact, had their equity returned. The early establishment of these policies had great influence in later years. The settlers did not forget that others had received favorable adjustments when difficulties were met.

The writer believes that a number of the settlers, particularly at Durham, could have paid more than they did, certainly during the early years. Other settlers were doing so with apparently the same opportunity. While this cannot be proved, one may quote the state auditor who as late as 1927 claimed that collections could have been better. He said:

Of the $110,666.22 due and delinquent on June 30, 1927 only 24 per cent have fallen due on last installment period. The remainder represents an accumulation of 10 years. Unquestionably the Board has been lax in enforcing collections. It is interesting to note that there are no delinquencies in Federal Farm Bank collections. Undoubtedly the exclusion of the colony from participation in legislative relief afforded at Delhi, is reflected in a disinclination on the part of certain settlers to meet their obligations to the State. Somehow the impression has gained ground that conditions are favorable to obtain some relief from the State and with that object in view it is not surprising that the delinquencies are mounting. It makes a good talking point. Properly applied pressure with an occasional foreclosure would have a salutary effect in reestablishing the morale and incidentally securing the working capital which is so badly needed.

There are 136 land contracts in force. Average holdings are 32½ acres, average delinquency is $814.00 per settler constituting a delinquency period of a little over 2 years; average equity in land is $800.00 per man so it is evident that the State must look to the improvements to be safe from loss in case of reversion. Twelve settlers have no equity at all, the amounts owing exceeding their payments by a sum approximating $11,000.248

Whether or not collections might have been better, the fact remains that from the first collections were not made and adjustments were easy to obtain. Regardless of what administration leaders said, their policies encouraged settlers to ask for more and more favorable terms. This was an important fact in the final distribution of losses.

THE "PROMISES" MADE IN SELLING THE LAND

The elimination of misleading information in selling land was a fundamental concept in the original settlement plan and the administration stressed the disinterested and unselfish character of its representations. That the interest of the settlers was given consideration is evident by a reply to an inquiry from Kentucky. The applicant was advised not to come because he had been receiving $3,000 annually and would find a change to Delhi disappointing.249 Usually, however, favorable aspects were stressed. A letter to a prospective applicant makes, for instance, the following statement.

The land in both settlements was selected by the experts of the University and bought at a price fixed by the Dean of the College of Agriculture and is being sold on terms that give the state back the money invested without a profit. . . . You would pay for established

248 California Department of Finance, Division of Budgets and Accounts. [Report on the Durham State Land Settlement as of June 30, 1927.] (Typewritten.)
orchards in . . . [the Santa Clara Valley, Modesto, and Chico] about five times as much as you would for one of the state farms.250

In another letter the following statement is made:

These land values are certain to rapidly increase. The development of the settlement, the improvement of the townsite, have all created an entirely different situation from that that prevailed when the price of this land was fixed at $350 an acre. If we were to revalue it would be put at double that price.251

Prospective applicants also were told to expect a high yield of alfalfa. Though the first stands of alfalfa at Delhi had been poor, applications of sulfur and of ground limestone and sulfur had been successful, and the Board, feeling that good crops would continue, made such statements as the following:

We bought several carloads of lime and lime sulphur for settlers at Delhi. Last year the lime sulphur gave fine results and this year we are encouraging settlers to use it under an arrangement that if there are no results from lime sulphur, the state will pay for the fertilizer. The results last year were so striking that we do not feel that this offer involves any risk.252

It was repeatedly asserted that alfalfa yielded 6, 7, and 10 tons an acre. Official advertising of the Board carried the following statement:

The soil is particularly suited to alfalfa. In 1922, the second year of settlement, two and one-half to three tons in single cuttings have been secured on the settlement. . . . It is estimated that the alfalfa fields will yield an average of eight tons to the acre in 1922. Five cuttings are always secured and sometimes six during the year.253

The following letter is typical:

Last year crops of alfalfa yielding ten tons to the acre were grown not on one farm but on several.254

The Santa Fe, in its advertising, described the situation as follows:

A twenty-acre farm, planted say five acres to alfalfa (which will take care of five cows), about five acres for some grain, nine acres equally divided between trees and vines, reserving one acre for house, barn and garden, makes a well balanced place. The trees and vines can be inter-planted with melons, cantaloupes, sweet potatoes, or tomatoes—all of which will do well and make profitable returns. It is represented by the Chairman of the Settlement Board that the returns from three cows will meet the annual land and interest payments.255

This last statement about the returns from three cows was often reiterated.256

The profitableness of peaches was also assured by statements such as the following:

The production of fruit, especially peaches and raisin grapes, will ultimately be the most

250 Mead, Elwood. Letter to G. P. Butters, Westmount, Canada. March 5, 1923. (Files of Giannini Foundation.)
251 Mead, Elwood. Letter to A. H. Thompson, St. Lawrence, South Dakota. February 27, 1922. (Files of State Land Settlement Office. Delhi, California.)
252 Mead, Elwood. Letter to Fred Kiesel, Sacramento, California. March 6, 1922. (Files of Giannini Foundation.)
253 California Department of Public Works, Division of Land Settlement. Information for intending settlers regarding the Ballico unit of the Delhi Land Settlement. September, 1922. (Broadside; in files of Giannini Foundation.)
254 Mead, Elwood. Letter to G. H. Hensley, Phelps, Wisconsin. March 27, 1923. (Files of Giannini Foundation.)
255 Seagraves, C. I. Circular letter. The Atchison, Topeka, and Santa Fe Railway Company. (Files of Giannini Foundation.)
important industry in the settlement. The soil is well adapted to the production of good
peaches.\textsuperscript{257}

One objective was to give the settlers guidance that would insure success regardless of their previous experience. The following statements by Dr. Mead are illustrative:

One of the objects in the creation of the State settlements in California was to place an inexperienced man on an equality or near an equality with a man who knew just what to do. This is done through there being in each settlement a highly qualified practical adviser who helps the settler to determine what to do and when to do it. We have taken in both settlements people with no experience and they are nearly all successful and go ahead with hope and confidence.\textsuperscript{258}

Answering your question about starting without experience, there is always some risk in doing this and it is impossible to say yes or no to your inquiry of whether one starting, as you express it, "entirely green," can succeed, but this can be said. The chances of people succeeding in these state settlements where they have the help of an expert farmer as an adviser, where the people are organized to cooperate, where they meet together to discuss their farming problems, are far greater than they are where a man is turned loose to find out for himself and some of our most successful settlers were city people with no farming experience whatever.\textsuperscript{259}

It is always better to see a place before buying, but, where this is not possible, you need have no misgiving as to any misrepresentation on the part of the state authorities in regard to these lands. You will understand that the state is not in this business to make money but to create new communities of contented, successful people and we have endeavored to have the value of different farms so adjusted as to make them all equally attractive. Selection is, therefore, a matter of personal choice. If it is left to the Delhi authorities they would, of course, choose the one that makes the strongest appeal to them, and their judgment is probably better than yours.\textsuperscript{260}

Another element in the land-sales program was the repeated assurance that liberal credit was available. All the settler had to do was to meet the minimum capital requirement and make the down payment. These assurances continued even after officials realized that money might run short. Mr. Kreutzer on his trip east in the spring of 1923 advertised as follows:

Millions of dollars have been spent to make them (the settlements) ready for colonization. And money will continue to be spent for no other reason than to help the new settler work out his problem.\textsuperscript{261}

That this phase of the program was stressed is shown in the following statement:

Practically every settler in Delhi was sold carrying an obligation on the part of the state to loan him necessary money for development. This appears to be a definite obligation. The mere acceptance of a settler, who on the face of it had insufficient capital to succeed without loans would bind us to this policy. In addition the office files disclosing relations with indi-

\textsuperscript{257} California Department of Public Works, Division of Land Settlement. Report... September 1, 1922. op. cit. p. 43.
\textsuperscript{258} Mead, Elwood. Letter to R. C. Baker, Portland, Oregon. February 13, 1923. (Files of Giannini Foundation.)
\textsuperscript{259} Mead, Elwood. Letter to Chester J. Lothian, Effingham Falls, New Hampshire. March 2, 1923. (Files of Giannini Foundation.)
\textsuperscript{260} Mead, Elwood. Letter to H. H. Koch, Dickinson, South Dakota. March 5, 1923. (Files of Giannini Foundation.)
\textsuperscript{261} California Department of Public Works, Division of Land Settlement. [Announcements of G. C. Kreutzer's trip to the Midwest. January, 1923.] (Advertisements; in files of C. M. Wooster.)
individuals would bind the State to this policy almost without exception. This has been one of the strongest and the outstanding sales argument.\footnote{Cook, Max. Existing conditions Delhi administrative affairs, April 1, 1924. (Typewritten; in files of State Land Settlement Office, Delhi, California.)}

Although no exact conclusions can be drawn as to how typical the foregoing statements were, the replies to hundreds of inquiries provide evidence that similar statements were common. The settlers constantly referred to the "promises" of the state officials and they became one of the most important factors in the final agreement.

**RESPONSIBILITY OF THE STATE FOR ITS "PROMISES"**

As the settlers came to understand the situation at the settlements, they began to claim that these "promises" constituted a foundation for a charge of fraud and misrepresentation. At Delhi no suits were ever instituted against the state but at Durham a number were threatened and a few were prosecuted. One of these is of interest here since it had to do with these charges.

In 1918 the Board sold Mr. H. H. Dingman a 40-acre farm for $8,366.40. He placed improvements on it valued at $5,500. He was unable to raise good crops and almost from the start was delinquent in his payments. In 1921 he left the place and leased it until 1924 when Mr. Walker offered him $5,500 for his equity. This, with the debt to the state, made a price of $12,772.19. Superintendent Kreutzer and the Board's Secretary represented Mr. Dingman in making the sale. Mr. Walker moved onto the place in the spring of 1924. The next winter the water table rose; the alfalfa and prune trees that year either died or produced very poorly.\footnote{Walker v. State Department of Public Works. (1930) 108 Cal. App. 508.} Thereafter only shallow-rooted crops would grow on the farm. In 1927 Mr. Walker sued the state for damages. The Appellate Court described the suit as follows:

Two causes for action were alleged. The first count charged Kreutzer as Superintendent of the State Land Settlement Board, . . . . and [the Board's Secretary] with fraudulently representing to the plaintiffs that the land was perfectly drained and was exceptionally well adapted to the growing of prune trees and alfalfa [and] would support at least one cow per acre. . . . The second count alleges loss and damages to the prune trees and alfalfa . . . . on account of negligence on the part of the board in constructing and maintaining an irrigation system with open ditches and which permitted the percolation of water through the soil of plaintiff's land, destroying the prune trees and alfalfa and ruining the fertility of the soil.\footnote{During 1923, the year before Mr. Walker purchased his farm, the rainfall was 15.08 inches, far less than the average since 1870 of 23.74 inches. The rainfall for each year after the settlement started was as follows:}

<table>
<thead>
<tr>
<th>Year</th>
<th>Inches</th>
<th>Year</th>
<th>Inches</th>
</tr>
</thead>
<tbody>
<tr>
<td>1918</td>
<td>21.43</td>
<td>1923</td>
<td>15.08</td>
</tr>
<tr>
<td>1919</td>
<td>21.74</td>
<td>1924</td>
<td>22.36</td>
</tr>
<tr>
<td>1920</td>
<td>31.74</td>
<td>1925</td>
<td>22.51</td>
</tr>
<tr>
<td>1921</td>
<td>23.57</td>
<td>1926</td>
<td>33.16</td>
</tr>
<tr>
<td>1922</td>
<td>27.41</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The rainfall during the period July 1, 1923, to June 30, 1924, was 14.31 inches and during the following 12-month period was 23.13 inches. In 1925 after a very dry spring, 4.09 inches fell in April, much later than usual. It is apparent that Mr. Walker purchased his farm at the end of an exceptionally dry period. These data are from the Chico station located about 3 miles from Mr. Walker's farm. (Data for 1870 through 1903 from: Henry, A. J. Climatology of the United States. U. S. Dept. Agr. Weather Bureau Bul. Q: 981, 1906. Data for 1904 through 1926 from: U. S. Dept. Agr. Weather Bureau. Report of the Chief of the Weather Bureau. Annual issues.)

\footnote{The rainfall during the period July 1, 1923, to June 30, 1924, was 14.31 inches and during the following 12-month period was 23.13 inches. In 1925 after a very dry spring, 4.09 inches fell in April, much later than usual. It is apparent that Mr. Walker purchased his farm at the end of an exceptionally dry period. These data are from the Chico station located about 3 miles from Mr. Walker's farm. (Data for 1870 through 1903 from: Henry, A. J. Climatology of the United States. U. S. Dept. Agr. Weather Bureau Bul. Q: 981, 1906. Data for 1904 through 1926 from: U. S. Dept. Agr. Weather Bureau. Report of the Chief of the Weather Bureau. Annual issues.)
In the trial a number of witnesses were heard who supported or contradicted the charges. It is noteworthy that nothing was presented concerning the early recommendations of the engineers that a more extensive drainage system would be needed. It is also noteworthy that witnesses introduced by the state agreed that the current value of the farm was only $5,000. The attorneys for the state always agreed that the plaintiff had suffered severe losses. For instance, in the hearing before the appellate court they made the following statement:

It is a fact in this case that after the sale the land proved for the time being to be unsuitable to alfalfa, prune trees or beets and that for a period of time, until such changes could be made in the irrigation and drainage systems as would lower the water table, the land would not have the value and productive capacity that Mr. Kreutzer.... regarded it as having.265

It is not to be thought that by these admissions the attorneys for the state were admitting all the claims of the plaintiffs. Rather they centered their defense around the charge of fraud and misrepresentation which they maintained was untrue. They regarded the fact that Mr. Walker had found the land to be unproductive as no proof that Mr. Kreutzer knew it and purposely misrepresented the character of the land.

The court of first instance with the aid of a jury gave judgment in favor of Mr. Walker and awarded him $7,500. On appeal this judgment was reversed and the case returned to the lower court. The appellate court's ruling was based only on the first cause but as the jury in the trial court had not distinguished between the two causes, the appellate court, having found one cause was insufficient, had to reverse the entire judgment. The court ruled as follows:

Since it is apparent the board had no legal authority to sell this land which belonged to Dingman, the representations of neither Kreutzer nor.... [the Board’s Secretary] could bind it, assuming that the statements constituted fraud and deceit.288

The court in its decision supported the defense of the attorneys for the state and emphasized that Mr. Dingman held legal title to the land, that this ownership was known by Mr. Walker, and that,

.... the plaintiffs were bound to take knowledge of the statutory limitations of authority on the part of the Board to resell only such land as it actually owned and controlled.267

While this technical point was the major reason for reversing the judgment, the court also ruled:

We are of the opinion the record will not sustain the charge of fraud and deceit which is alleged in the first cause of action for the reason that the evidence refutes the possession of knowledge.... that.... [the statements] were untrue.289

This was the only serious attempt by a settler to establish in court a charge of fraud and misrepresentation. Most settlers, however, claimed that the state was obligated to them. This had been expressed by the attorney for Mr. Walker as follows:

.... it appears to the writer that the State Land Settlement Board had established a confidential relationship between its officers and settlers by representing in published litera-

267 Ibid. p. 515.
268 Ibid. p. 516.
ture that the State would advise colonists in all matters relating to the purchase and farming of their allotments, and by actually undertaking to do so, it lulled the settlers into a sense of security, for they believed that with the guiding hand of the State represented by its expert officials, they could not err, and they placed express and implicit confidence in the advice given. While of course there is no confidential relationship generally between officials of the State and the public dealing therewith, the writer believes that the State Land Settlement Board itself sought to and did create that relationship, by virtue of its numerous pamphlets, circulars, and literature, wherein the picture of Land Colony life was glowingly made, for the express purpose of inducing people to purchase, and entrust the selection of their allotments and the handling of their individual farms to the guiding hand of the State.

The same attitude is expressed by another settler at Durham in his application for a more liberal adjustment than he was first offered.

I am sixty-five years of age; my wife is sixty-three. We bought this property eight years ago, in 1922. It was represented to me to be alfalfa land.

The second year I was there, I planted about one-half the land to alfalfa. I expended the little money that I had after making my initial payment, in purchasing dairy equipment, because I was advised to do so, and that that was what it was fitted for. This advice was given me, of course, by the State's agents. The first year I raised enough alfalfa to feed seven head of cows. The second year I had enough for nine and sold three loads of hay, but by the third year, the alfalfa was mostly gone. It was gone because it had lived as long as alfalfa can be made to live on that soil. It dies because of the high water table. I was forced to sell my cows at a loss.

At this time I requested the superintendent to permit me to sell my allotment and to buy a cheaper allotment with less improvements in its place. If I had been permitted to do this, I could have kept my payments up, but the State refused to permit me to do so.

I was assured that with the means available, I, or anybody else, could make a go of it. I put all that I had into improvements and payments and most of the money that came from crops—keeping out only enough to secure absolute necessities for myself and wife. The only crops that I can raise on my place are short-rooted crops, such as beans and corn, and grain.

I believe my allotment was priced too high in the first place.

We were assured that we would have a drainage system that would afford proper drainage for the land, but no system has ever been supplied to take care of the drainage water and the natural drains and those that originally afforded drainage, have been filled up and the land suffers in consequence.

My place had a ditch along the East side which was about eight feet from my boundary line. This strip, extending the entire length of my place, was useless unless I moved the ditch over to my line so as to be able to cultivate more of my land. This I did at considerable expense. I was charged for the cost of constructing this ditch as an improvement, and as a matter of fact, it was no improvement at all, for it was in the wrong place, and I had to, and did, change its location, as above stated.

My money is all gone and I have suffered a very substantial loss by attempting, in good faith, to prove the land to be adapted to the crops that I was assured it was adapted to, but was not, in truth and in fact, adapted to produce such crops.

I feel that the additional allowance requested is no more than is reasonable under all the circumstances, and I know that if the State will settle with me upon the basis I desire, it will receive the full worth of the land I am purchasing.

A similar attitude was expressed by a Delhi settler as follows:

Most of us know from direct experience this soil will not yield much beyond a living for the farmer even in good times and that it is impossible to pay our present indebtedness from the products of the land. I wonder if even you are aware of the large number of well-developed farm homes that have been abandoned or leased for little or nothing because the owners themselves were unable to make even a living from them. When we consider that during the past nine years the land has been at least as productive as it will be during the

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270 Letter. (Files of California Department of Finance, Division of State Lands.)
next eight years and the prices for products higher we must conclude that the contracts which
the State holds are of little value. The Book Value of the State's equity is so pleasant to look
at and the actual depreciation of those values so unpleasant to consider that the State is
finding it difficult to put the plans for reconstruction on a basis where the land can pay out.
It is difficult to estimate how much the settlers have put into this colony in cash. Probably
not less than $900,000 in money and $1,500,000 in labor or a total of $2,400,000. As matters
stand today this is practically a total loss to the settler for with the exception of personal
property, live stock, etc., there is no salvage value.

...this is not an action against the State, but simply a sensible business move on our
part.

We believe that any ideas of revenge or coercion should be left out of any plan of recon­
struction and we have based all consideration on a fair and equitable basis to ourselves and
to the State and ask you to do the same.271

The attorneys for the Division of Land Settlement described the problem as follows:

There are very many settlers who are in default on their contracts. Many of them owe to
the state much more than their land is worth. If the state should foreclose the contracts it
would be put to the expense of a law suit in practically every case, because the settlers are
in a mood to fight every move of that sort that the state might make, and they would have the
support of the public and of the trial courts and juries. The state would be put to heavy
expense in the trial of the cases and would at best recover the possession of land that it could
not resell for as much as it can get from the present contract purchasers upon a readjustment
of their contracts based on the actual situation.272

The statement just quoted was from a hearing before the California
Supreme Court on the constitutionality of the final adjustment. It was a
petition for a writ of mandate to force the State Controller to honor warrants
drawn to the credit of a settler. The attorney for the Controller stated the
question as follows:

.... "the adjustment" means that in the judgment of the Director of Agriculture, the
price .... [setter] paid for the land was too much, and he is to be presented with the sum
of Twenty-four hundred and seventy-eight dollars ($2478.00) of public money, representing,
in effect, the difference between what he agreed to pay and did pay for the land, and what it
is now figured he ought to have paid, and the question is whether or not the act of the Legis­
lature .... under which this adjustment was accomplished, is lawful and constitutional.273

The attorneys for the Division of Land Settlement replied as follows:

Such is counsel's impression of the situation, and it represents the background for his
arguments. But we have been in close touch with land colony administration. We know just
what sort of mess the colonies have been and now are in and how imperative it has been and
is that the state get out of the business as expeditiously as possible. The law as it was drawn
was applied to those facts .... [setter] did, in the light of subsequent experience, pay too
much for his land.274

271 Batterman, W. S. [Speech at Delhi, November 9, 1928.] In: Settlers' executive meeting
was held Friday night; proposition discussed. Delhi Record 5(41) :4. November 16, 1928.
p. 40. (Typewritten.)
in support of demurrer to petition for writ of mandate. p. 2. (Typewritten.)
p. 39. (Typewritten.)
The court upheld the constitutionality of the act in a decision which read in part as follows:

When the Legislature has stated that protection and conservation of the investments already made and the welfare of the settlements will be subserved by the withdrawal of the State from further responsibility in respect thereto, the Legislature has stated a public purpose and whatever moneys are necessarily spent pursuant to the authority given, though incidentally they may also benefit personally the settlers to whom such payments are made, do not constitute a gift of public moneys, ....

.... we are also of the opinion that a proper construction of the act leads to the conclusion that no payment of moneys or allowance of credit is contemplated unless the same be in consideration of the extinguishment of obligations existing or to arise against the State Land Settlement Board or its successors by reason of their past conduct in the administration of the affairs of the settlements.275

These views reveal two basic elements. The first was that the returns from the land were so poor that losses were inevitable. The second element was that the state should bear a large part of the losses involved. The legal obligation on the part of the settlement administration to return to the state all sums used in land settlement276 and the legal power of the state to foreclose on the settlers and force them to take the first loss277 were never given serious consideration. The rejection of these written contracts as defining the rights and obligations of the parties concerned and the insistence on intangible and undefined claims arising out of the state's policy of aid and direction led to the confusion and conflicts which are being described.

THE IRRIGATION SYSTEMS

Another important factor in the final distribution of losses was that the state had installed and was operating the irrigation systems. The problem was particularly important at Durham. The settlers in later years refused to cooperate in the management of the system there; in fact individual settlers threatened a charge of trespass against state men who were on their farms attending to the irrigation. Some started suits for damages. The second cause for the action started by Mr. Walker was for improper operation of the irrigation system. A similar charge was made by a Mr. Meyer, and at the time of final adjustment he held a judgment for $9,500 against the state.278 Under the circumstances the operation of the systems constituted an obligation on the part of the state more important than the obligation of the settlers to pay their debts. The situation was described as follows:

The state has an irrigation system at Durham and another at Delhi. The operation of the systems has been a constant source of annoyance and expense. It is true that the state charges tolls, but they are not a lien upon the land, and if they are not paid, they cannot, in many cases, be collected. The state may refuse to deliver water; if it does the security it has for the payment of the purchase price of the land is impaired. It cannot abandon the irrigation systems without largely destroying the value of the securities and of the lands that it owns in the colonies. It cannot transfer them without finding some organization to transfer

275 Hecke v. Riley. (1930) 209 Cal. 767. (See especially p. 773–74.)
276 "A revolving fund to be known as the 'land settlement fund,' which is calculated to be returned to the State with interest at the rate of four per cent per annum within a period of fifty years from the date of the passage of this act." (California Statutes, 1917. Chap. 755, Sec. 25.)
277 See contracts. (Files of Giannini Foundation.)
them to. In Durham it proposes to turn over the system to a mutual water company, which has been formed for that purpose. But the water company must control the water rights which are owned by the settlers or are held by them under contract. The state cannot transfer them to the water company; it must induce the settlers to do so. It is not essential that all of the settlers cooperate but a sufficient number must do so if the water company is to be able to function with such efficiency as to protect the interest of the state itself. In Delhi the plan is to transfer the system to an improvement district within an irrigation district, and it was found necessary to amend the improvement district law to cover the situation. The improvement district cannot be formed without cooperation from the settlers in the signing of petitions. That cooperation cannot be obtained without the making of allowances and revising the contracts of the settlers.  

GROUP ACTION

One factor in the strength of the settlers’ demands against the state was the group nature of the settlements. Originally adopted in order to facilitate control by the state, group settlement eventually made possible political pressure by the settlers. They could meet together, encourage one another, and take common action. While at Durham individual action seems to have been more important—all suits instituted against the state were by settlers at Durham—group action played some part. During Mr. Wooster’s administration and in response to threatened foreclosure, the Durham Settlers’ Association was formed. While it never represented many of the settlers, considerable unity was achieved in the settlers’ refusal to pay their debts. The word was passed around that no payments were to be made; anyone who paid was regarded by many as disloyal to his neighbors.

At Delhi, however, group action was most important. Illustrative of this action was the community’s support of a local weekly, the Delhi Record. It was started by the settlement officers as a mimeographed information circular but was taken over as a private enterprise and developed into a country weekly. Throughout the period under survey it served as an important center of information and expression.

The way in which the settlers obtained the 1925 adjustment has already been described (p. 459–67). Their early organization was revived when trouble again developed, and by 1928 they had strong and energetic leadership. The state officers recognized the importance of the settlers’ organization and tried to deal with the settlers through it. Thus through this organization the original plan of adjustment, “plan W,” was arrived at.

“Plan W.”—The amount owed the state by the Delhi settlers on December 31, 1927, was more than $1,300,000. Mr. Cleary at first suggested that this be reduced to $550,000, but the Settlers’ Executive Committee was reported to have offered only $250,000. A compromise was made in April, 1929, at $375,000. This was the amount that the Legislature had in mind when it acted that spring and it was approved at a mass meeting by about 85 per cent of the settlers.

279 Hecke v. Riley. (1930) 209 Cal. 767. S.F. 13,889. Reply brief on behalf of petitioner. p. 42–43. (Typewritten.) (The improvement district law referred to was California Statutes, 1929. Chap. 189.)
281 California Department of Agriculture, Division of Land Settlement. Final Report. June 30, 1931. op. cit. p. 15. (This is a valuable publication, for it contains a résumé of the history of the settlements and the views of those who brought about the final settlement.)
By December the details of allocating this reduction among the settlers had been worked out and was presented as follows:

The purpose of this meeting is to explain to the Settlers the plan by which the individual settlers will pay off the obligation of $375,000 to the State, as was agreed upon April 3, 1929, at Sacramento.

The Plan—
1. Settler will be charged with all loans and interest.
2. Settler will be charged with 35% of the 1925 contract price for land plus one per cent interest from date of said contract.
3. Settler will be charged with 50% of the Original cost of Pipe line plus 5% interest from date of installation.
4. Settler will be credited with approximately 11% of the replacement of all improvements except pipe lines.

The settler was to give the state a deed of trust for his remaining indebtedness or if possible pay it outright. If his debt was less than the reduction in value, then the difference would be paid to him in cash. This last cash transaction was necessary to assure a fair deal to any settler who had made a heavier investment than the others and thus had a larger equity. Where the figures showed no settler's equity in the property, the state was willing to take it over, paying $100 for a quitclaim deed, if the settler so desired. If the settler's equity was so low that he would be unlikely to pay out, the state was willing to purchase the property at the equity shown. If the state officials thought the property was not of the type subject to such purchase, the question was left to an arbitration committee.

To appreciate the settlers' reaction one must know the effect of "plan W" on individuals. Of the 232 settlers at Delhi, 24 would have had nothing more to pay, would have received deeds to their allotments, and would have had additional credit besides; 9 would have had less than $100 to pay. On the other hand, 13 would have still owed so much that they would have had no equity at all as determined by the new valuation; 30 would have had less than 20 per cent equity; and 117 would have owed more than $1,000 each even after the adjustment. The great difference in equities is explained partly by the fact that some settlers had borrowed heavily and had made only small payments, whereas others had borrowed less and had kept on paying. The final balance of each was calculated by the equal application of general and proportionate reductions.

The plan represented much work and study and was adopted only after about twenty other plans had been discarded. The leaders hoped that it would be accepted by enough settlers so that the final agreement would go forward without delay. The executive committee had used every resource to reduce the indebtedness to $375,000, and the land-settlement board had given every indication that a greater reduction would not be allowed.

Delhi as a "Pressure Group."—Just when the whole problem appeared solved, a group of settlers began to agitate for more favorable terms. Al-
though these men at first constituted only about 40 out of the 232 contract holders, they would owe about a third of the indebtedness remaining after the acceptance of "plan W." By energetic organization and publicity they obtained the support of various state groups and newspapers. Of equal importance, they threw everything into confusion.

In December, 1929, the only group wholeheartedly supporting "plan W" was the Settlers' Executive Committee. The state officials, feeling that the terms were perhaps more liberal than they were justified in allowing, did not immediately agree to accept the plan. Only after considerable urging by the Settlers' Executive Committee did the state officials make it absolutely clear that they would accept "plan W." By this time, however, the minority were strenuously campaigning for more liberal terms. While some objected to the rigid application of the plan to all alike because the settlers differed in their needs, others became more vitriolic than ever in their denunciation of the state. Some declared that the land was worthless and should be given to the settlers. Some said the state should apologize and ask each individual how much it owed him. Another man remarked, "If it is necessary for wives to work like men, the sooner the land is turned back to the jack rabbits and coyotes, the better."

There were innumerable complications. The lawyers consulted found that the 1929 law did not give the State Land Settlement Board power to foreclose on any settler. Rather, the Board was specifically instructed to keep the settlers' welfare in mind and to settle all disputes with them. The administration was required by law to effect an agreement; each settler was free to agree or not. A small minority could prevent the transfer of the irrigation system to the Turlock District. By January there was a question of legality of all proceedings because, according to law, the final agreement should have been concluded by then. The settlers were well on the way to make the issue a political one. To press their case, the opponents of "plan W" began raising money at a dollar an acre to sue the state.

In the meantime Mr. Cleary and the Board had tried to get "plan W" accepted and 65 per cent of the settlers had signed. Mr. Cleary's argument was as follows:

This "write-off" is in consideration of the various mistakes made by the State in connection with the colony including the mistake of starting the project and in consideration of the State's desire to retire from the project as colonization agent.

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286 Anonymous. Irrigation problems important in settlers' adjustment plans, opinion of Wednesday's meet. Delhi Record 6(49) :1. January 10, 1930.
288 "It shall be the duty of the director of agriculture to prepare and present to the state land settlement board for its approval on or before January 1, 1930, a plan or plans for the readjustment of land settlement affairs on a basis which will provide for the withdrawal of the state, not later than four months from and after the final adjournment of the forty-ninth session of the Legislature of the State of California, from the conduct of land settlement or colonization projects." (California Statutes, 1929. Chap. 352, Sec. 5.)
289 Anonymous. Settlement affair may result in statewide future political campaign weapon, is belief. Delhi Record 6(52) :1. January 31, 1930.
290 Anonymous. Opposers of plan "W" to meet with State Land Settlement Board in Governor's chamber at Sacramento this morning at ten o'clock. Delhi Record 7(2) :1. February 14, 1930.
Opposition to "plan W" has to a considerable extent been developed through the circulation of rumors and misinformation. Hysteria and emotion have been aroused where sound sense is needed. A plain statement by the State of a manifestly proper policy regarding administrative procedure under "plan W" has been misconstrued as a threat to compel you to accept the plan.

The State believes that "plan W" offers an ample and generous adjustment, as fairly distributed as conditions will permit; which opinion is concurred in by your committee. In the event that a sufficient number of you accept "Plan W" to establish it as the basis of procedure, this justifies a policy of administration under it respecting those who do not then accept, that provides for due additional notice and a fair opportunity to accept, after which, failure to accept will be construed as an election by the settler to stand on his existing contract and that contract will be enforced to the limit that the law and legal procedure will permit. . . .

Should a sufficient number of you be influenced by selfish or misguided leadership or advisers to cause a failure to take advantage of the opportunity to obtain this adjustment, the responsibility for any future distress which you may suffer as a result of such failure will rest upon that leadership and those advisers and not upon the State of California.

This letter is not written in any attempt to coerce or force you to do something against your will but is simply a statement of facts which I believe is due you at this time.291

Mr. Cleary sent this letter on January 9, 1930, and during the following weeks made every effort to obtain a more general acceptance. February 14 was set as the dead line.292 But with the support of important political groups, the opponents of "plan W" had been able to win the Governor's attention.293 He granted a 60-day delay, called a meeting of the Board and of leaders among the settlers, and asked Mr. E. G. Adams, the local assemblyman, to try to settle the matter. At first, this precipitated a sharp quarrel between the Settlers' Executive Committee and Mr. Adams.294 The committee wanted no delay because they were always afraid that the state would settle with the disabled veterans and then institute court action against those with considerable equity. Mr. Adams, on the other hand, advised the settlers not to accept "plan W." His reasons were as follows:

I am convinced that $375,000 is too large a sum to expect the colonists to pay because, to my satisfaction, it is provable that the settlers cannot pay that much. I am convinced that $375,000 is too much because if that be the state's final demand at least 25 per cent of the settlers, and possibly 50 per cent, will be forced to vacate either immediately, or within one year.

Based upon the knowledge of the situation in Delhi which I have been able to acquire by first listening to the explanation of their individual cases to me and then by questioning a very considerable number of the colonists, I make the tentative conclusion that a figure just one-half the present figure of $375,000 could not possibly be far from the correct amount to propose and to undertake to convince the State that it should ask in lieu of the present amount.

That sum [$375,000] means neither a settlement nor an adjustment to the sense of fullness contemplated by the state as I understood that contemplation last spring. It means neither a fair settlement nor a defensible one. On the contrary it means ruin for a large percentage


Also see: Anonymous. Thursday, last day for acceptance of plan "W" according to C. W. Cleary. Delhi Record 6(52) :1. January 31, 1930.

292 Anonymous. Plan "W" is accepted. Delhi Record 7(1) :1. February 7, 1930.

293 Anonymous. Opposers of plan "W" to meet with State Land Settlement Board in Governor's chamber at Sacramento this morning at ten o'clock. Delhi Record 7(2) :1. February 14, 1930.

294 See various items in: Delhi Record 7(2) :1. February 14, 1930.
of Delhi families, who, under differing conditions which I feel we have a right to ask, would remain successfully and happily on their home places. It means justification on the part of many settlers to institute litigation against the state. It means three classifications of Delhi settlers rather than one. Those three are, first, those to whom this adjustment is agreeable and just; second, those to whom it offers some faint glimmer of hope only and who therefore might reluctantly accept it rather than face the terms of their old contracts and, third, those to whom it can mean nothing but immediate ejection.

If I am correct in my judgment that in the second and third classes will be found far more than half the people of Delhi, then that is all the proof that any reasonable man could ask that this adjustment is not a proper and adequate one. 296 The opposition to “plan W” was too strong and a new committee was appointed composed of the old Settlers’ Executive Committee and of opponents, with Mr. Adams as head. It was insisted that those who had already accepted “plan W” would not be discriminated against in a more liberal adjustment. Mr. Adams then got in touch with every settler and worked out individual agreements with each one. 296

In working out these individual agreements Mr. Adams was unable to maintain equity as between the settlers. He described the adjustment as follows:

The mistakes in my plan, which we may term inequalities, in some cases at least were necessary to secure signatures. Others were wholly unintentional. On the whole they are more glaring than I had suspected. But the fact that they are glaring is not now, nor never could be, a subject for successful criticism from any source which would rate sufficient for us to risk failure of the whole withdrawal undertaking at this time to forestall. Policy, covering a wide range, is still the paramount motive for concluding the negotiations on the basis I have proposed and policy remains the conclusive reason why, just and fair and defensible as your revisions are, those revisions should not even be proposed at Delhi, let alone attempted. 297

The state officials described the situation as follows:

The board, while recognizing the inequities, as between individual settlers, in the Adams figures and the general fact that the settlers were receiving thereunder larger adjustment credits, in many instances, than in equity they were entitled to receive, nevertheless, after due consideration, concluded that absolute equity could never be accomplished; that it was apparent that the settler least favorably affected by the Adams figures was nevertheless receiving a generously adequate adjustment; and that an adjustment on the basis of the Adams figures was preferable to continued proprietorship by the State, . . . 298

A great deal of criticism has been given to the part played by the veterans in the settlement at Delhi. The state officers who worked out the final settlement made the following statement regarding the veterans.

Records indicate that this group of settlers was a source of trouble from the start and there


were fourteen of them still in the colony when the present readjustment was undertaken. In connection with the adjustment and all attempts to work out a program the presence of these disabled veterans as settlers worked eternally against a reasonable basis of adjustment, though some individuals in the group were very reasonable and fair in their attitude toward the State.

As a group the disabled veterans seem to have received the best deal. Under "plan W" they would still have owed $59,872. Under the final adjustment they received a net credit of $2,443. They had great political power, and as individuals, they had an assurance that other settlers lacked. Their attitude, however, was not peculiar to them. Any difference that existed was one of degree. This fact was shown abundantly by the parallel experience at Durham, where there was only 1 or 2 veterans. When the proportion of extremists among the veterans as a whole is compared with the extremists among the others, there is little difference. For instance, 42 out of 68 veterans accepted "plan W," about the same ratio as was found among the rest of the settlers. Most of the settlers became hard to deal with. It seemed to some critics that, as Americans, they were inherently antagonistic to governmental supervision and control.

THE DELHI ADJUSTMENT

Since the agreement effected was based on individual circumstances, with no exact application of any formula, only a few specific details can be given. This adjustment, of course, was in addition to the 1925 adjustment. In the final adjustment the settlers on laborers' allotments had their debts reduced on the average from $969 to $44; those on poultry farms from $2,198 to $272; those on the larger farms from $8,802 to $1,111. Fifty-nine settlers received credit balances totaling $40,078. Fourteen received over $1,000 in cash each besides the deeds to their farms. One man received nearly $5,000 in cash. The state not only allowed these credits but, under certain conditions, bought back the farms at the new valuation less the amount still due the state. Under this arrangement 22 settlers sold their farms to the state, and 7 more made trades for other property.

Before the final adjustment at Delhi, a special agreement had to be worked out with the Federal Land Bank at Berkeley and with the Delhi National Farm Loan Association; the settlers had failed to meet their payments on many properties on which the bank had placed loans, and those who were members of the Association were liable up to 10 per cent of their own loans for any losses to the bank. The settlers consequently required the state to reimburse the bank so that no later claim would be placed against them. The arrangement worked out with the bank and the Association was as follows:

In the process of adjustment with the purchasers of Delhi properties in 1930 and prior thereto, 32 pieces of property, aggregating 915 acres, reverted to the State subject to first mortgages of the Federal Land Bank of Berkeley. It became apparent that it would be impossible to dispose of these properties for even enough to pay the obligations against them and as there was not sufficient in the land settlement fund to meet the regular semi-annual payments to the Bank or the irrigation taxes and as the rental incomes were not enough to meet these obligations, arrangements were made to transfer these properties to the Federal Land Bank.

300 Smith, J. Winter. Final Report. [Final adjustment figures as of May 1, 1930.] (Typewritten; in files of California Department of Finance, Division of State Lands.)
... upon the sale of these properties the obligations to the Federal Land Bank of Berkeley would be reduced to amounts reasonably believed to be low enough to protect the Association's membership from possible loss. As there were no funds available in the land settlement fund to reduce the obligations in the amount agreed upon, arrangements were made to transfer to the Federal Land Bank promissory notes secured by trust deeds held by the State on properties in the Delhi State Land Settlement at the face value of $18,583.00, the amount of difference at the time of transfer. The State also transferred an additional number of such securities at the face value of $13,992.00.\footnote{California Department of Finance, Division of State Lands. [Report to the Governor and the Legislature on status of disposal of settlement lands.] January 26, 1935. p. 6. (Typewritten; in files of Giannini Foundation.)}

### TABLE 10

**Financial Statement of Delhi State Land Settlement, June 30, 1931**

<table>
<thead>
<tr>
<th>Assets</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Available funds</td>
<td>$11,872.47</td>
</tr>
<tr>
<td>Deferred indebtedness</td>
<td>$77,177.62</td>
</tr>
<tr>
<td>Unsold land</td>
<td>$298,978.00</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>$18,081.12</td>
</tr>
<tr>
<td><strong>Total assets</strong></td>
<td>$406,109.21</td>
</tr>
<tr>
<td><strong>Deficit</strong></td>
<td>$2,097,520.80*</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Liabilities</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total</strong></td>
<td>$2,503,650.01</td>
</tr>
</tbody>
</table>

\* Deficit includes $127,819.59 accrued interest due the general fund from the Land Settlement Fund.

**Source of data:**

This additional transfer was stated to be in consideration of: accrued interest on loans against properties; first installment, Turlock Irrigation District taxes, assessed against properties for fiscal year 1932-33; maximum liability of state by virtue of stock issued by Delhi National Farm Loan Association at time loans were made on properties; abstract of titles to properties; and reserve for losses on account of failure of promisors of promissory notes secured by deeds of trust on real properties to meet principal and interest payments. This arrangement with its security transfers reveals the low value placed on Delhi land and the ingenuity required to effect a settlement.

**THE DURHAM ADJUSTMENT**

The settlers at Durham who were included in the general adjustment plan were those on the better soils and who owned 3,546 acres. Most of the adobe and pasture lands had been taken back by the state and were sold outright. The water rights originally given with the adobe lands were kept by the state and distributed among the owners of the better soils. These settlers on June 30, 1928, which was the date on which the adjustments were figured, owed the state $485,086. They were granted credits totaling $371,028, which left a net debt of $114,058. Forty-one settlers received balances aggregating $40,469. Part of the adjustment was based on a revaluation of the land and started with a minimum reduction of 50 per cent of the original sale price. The adjustment
in many cases allowed an additional reduction in order to compensate for damages from the irrigation system. 802

**FINANCIAL RESULT FOR THE STATE**

Tables 10 and 11 are summaries of the final financial statements of the two settlements. They show a deficit of $427,995.59 for Durham and of $2,097,520.80 for Delhi. This plus the $350,000 interest remission in 1925 for Delhi approximates the loss sustained by the state up to the final agreement. Since most of the agreements were settled early in 1930 and were based on valuations made early in 1929, these losses were, of course, due in very little part to the depression which began in 1929.

**TABLE 11**

**FINANCIAL STATEMENT OF DURHAM STATE LAND SETTLEMENT, JUNE 30, 1931**

<table>
<thead>
<tr>
<th>Assets:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Available funds</td>
<td>7,973.07</td>
</tr>
<tr>
<td>Deferred indebtedness</td>
<td>121,946.15</td>
</tr>
<tr>
<td>Delinquent indebtedness</td>
<td>1,433.29</td>
</tr>
<tr>
<td>Farm allotments unsold</td>
<td>54,421.60</td>
</tr>
<tr>
<td>Improvements on same</td>
<td>2,250.00</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>4,554.67</td>
</tr>
<tr>
<td>Total assets</td>
<td>192,578.78</td>
</tr>
<tr>
<td>Deficit</td>
<td>427,995.59*</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Liabilities:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>$620,574.37</td>
</tr>
</tbody>
</table>

* Deficit includes $66,365.53 interest due the general fund of the state from the Land Settlement Fund.

Source of data:

Some additional losses were incurred in liquidating the remaining assets of the state and were in part due to the depression which followed 1929. By 1935 the Durham books had been cleared of all but $600 of the deferred indebtedness, which, plus interest, had once had a book value of $130,002.36 but for which the state received only $82,850.33, a loss of $47,152.03. 803 The farm sales recorded show that for land valued at $44,700.25 at the final adjustment, the state received $26,065.53, or a loss of $18,634.72. At Delhi $35,311.41 of the deferred indebtedness was liquidated for $30,564.20, and 793 acres traded at a valuation of $36,953.50. 804

**CONCLUSIONS**

A review of the California State Land Settlements at Durham and Delhi is fraught with difficulties. Not only were there numerous and various factors involved in the situation that came to prevail at the settlements but they were

804 California Department of Finance, Division of State Lands. [Supplementary report to the Governor and Legislature on status of disposal of settlement lands.] April 30, 1935. p. 1–3 and exhibits A to C. (Typewritten; in files of Giannini Foundation.)
complex and often indeterminate. There were divergent viewpoints and bitter conflicts among the people involved. These attitudes, however, although ever present in later years, had little to do with the initial failure; neither groups nor personalities brought about the results obtained; rather the California State Land Settlement Board was defeated by unfeeling and relentless physical facts.

THE CAUSES OF FAILURE

Crop Failures.—Durham and Delhi failed primarily because the high-income crops, for which both settlements had been planned, failed. These failures necessitated the growing of low-income crops for which the original purchase prices and costs of development were too high and for which the individual farms were too small for profitable farming. The crop losses, moreover, were due to physical and biological factors which in the main were not subject to correction. Crops failed regardless of the care given them. The proponents of state land settlement had believed that by the provision of liberal credits, by the use of trained agriculturists, and by proper colonizing methods and procedures, the state would be able to colonize successfully. The program, however, regardless of its character, was of no avail at Durham and Delhi because the poor soil and the high costs of development could not be corrected and farming could not be made profitable under such circumstances.

Appraisals and Planning.—The reason that poor land was purchased and that too high a price was paid rests in part on the inevitable chance that is always existent in the purchase and development of land, in part on the character of the appraisals, and in part on the lack of better choices. It now appears that serious risks were taken at the times when the two tracts were purchased. While some of the factors which caused failure were unknown, others were known; their significance was simply not realized. In part this seems to have been due to the fact that the Board's own detailed soil surveys, the special crop analyses, the detailed estimates of costs, and the farm-management plans were made after the purchases had been made. Those making detailed studies were seriously handicapped in such circumstances. Since they made their studies after the Board was committed to buy these tracts at high prices, they were logically excluded from giving attention either to feasibility or to the alternative of low-income crops. The desirability of making and examining detailed plans before deciding on the feasibility of a project seems to have been demonstrated.

Lack of Suitable Land.—A great many people have claimed that other tracts should have been selected; probably one or two other tracts would have served better. In the light of the information obtained or obtainable at the time of purchase, however, the choices made appear reasonable, if one assumes that a tract had to be purchased. The significant feature is that so few tracts were found that were worth considering. The proponents of land settlement had believed that millions of acres of land were available; yet the Board had few worth-while tracts to select from, and the ones which they thought were the best, turned out to be unsuitable. It must be emphasized that this unsuitability of the available land was due to physical factors, factors not susceptible to correction. As far as group settlement of tracts several thousand acres in size is concerned, it seems apparent that the State Land Settlement
Board encountered a fundamental limiting factor. The situation may also be regarded as of a permanent character except where technical or economic changes have occurred sufficiently important to overcome the disadvantages that existed.

**Price Fluctuations.**—There were, of course, factors other than poor land which contributed to the failures. At the time the Delhi and Durham tracts were purchased, price relations were favorable to agriculture and expansion seemed to be desirable and profitable. The opposite situation prevailed during the twenties and was unfavorable to development. It is apparent, however, that the statement sometimes made that economic changes and price fluctuation caused the failure of the settlements cannot be sustained. It has been shown that although the prices of labor and materials for construction at Durham were higher than anticipated, the settlers there were partially compensated by higher farm-produce prices. The Board, furthermore, had its extra expenses there much more than offset by the experience at Delhi, where prices of labor and materials were lower than at the time the land was purchased and where much more construction was required. Changes in prices of products sold were unfavorable but were not of first importance so far as cash income was concerned because of the lack of produce to sell. Psychologically it was discouraging, although at Delhi most settlers arrived after prices dropped. Price changes somewhat reduced interest in buying land, yet sales continued and land prices were largely sustained in adjacent areas. When compared with the almost complete loss of intensive crops, price fluctuations cannot be considered of dominant importance in the failures.

**Credit.**—While it has been claimed that the existent credit shortage prevented many settlers from achieving success, this has not been found to be generally true. While money was lacking to develop more farms, enough money was spent on most of the occupied farms to have developed them successfully, if the soil had been productive. The statistics on alfalfa, trees, and dairies, with the accompanying accumulation of investments, are very good proof that capital was adequate. In fact, credit might have been husbanded to advantage at Durham. Farms were improved for one enterprise, such as dairying, and then shifted to another, such as fruit. A number of expensive but little-used buildings were erected. The only inadequacy of capital was also at Durham where it may have prevented an attempt to drain the land. Even in this instance funds were probably available at one time; the Board spent them at Delhi rather than at Durham. No provision, moreover, seems to have been made by which any such expenditures could have been charged to the settlers.

It is sometimes claimed that the Board’s policy of loaning up to 95 per cent of the value of the land and up to 60 per cent of the value of improvements so loaded the settlers with debt that they could not pay out and hence was a cause of failure. No important difference has been noted between those who borrowed the maximum amount and those who borrowed less; they all had comparable claims against the state. Those who borrowed heavily were perhaps more extreme in their demands, but the state’s liberal collection and adjustment policies obliterated differences which otherwise might have existed.

It is true that a settler with a large equity and a small loan could repay easier and could sustain losses better. The total losses to society, however,
would be the same, and it is the total return on total investment that must be considered in examining the success of an enterprise. From the viewpoint of planning, the settler was just as entitled to a return on his own investment as he was obligated to make a return on borrowed funds.

Settlers.—The settlers have often been charged with incompetence and the point made that they themselves brought about failure. In reality, almost all the settlers at Durham and a large number of those at Delhi, were as capable as could be expected. Significantly, crops failed regardless of individual abilities. The settlers have also been charged with unwarranted antagonism to the state's program. While later they became difficult to deal with, in the first years when success seemed possible, they were very cooperative. The change in attitude is to be attributed to lack of income, in turn due to poor crops. It is difficult to overemphasize the effect of a crop loss on a farmer; the rapidly mounting delinquencies must have been discouraging.

Administration.—In the administration of the program the officials have been accused of inexperience, poor judgment, extravagance, and even fraud. The evidence for these charges has been carefully examined. The officers' correspondence has been read, office records have been searched, reports of auditors and special investigators studied, and interviews obtained with most of the people concerned. No fraud has ever been proved. Some of the staff lacked experience when they took over their duties, but they soon compensated for this lack by application and willingness to learn. Engineers seem to agree that in general the projects were well designed and executed. The important exception was the interference with natural drains at Durham. Expenses were much higher than anticipated and thus provide the reason for the charge of extravagance. The reason for high costs at Durham, however, was the increase in prices. High costs were inevitable at Delhi. They were unexpected because of inadequate estimating.

The administration of Governor Richardson and Mr. Wooster has been accused of wrecking the settlements but there is nothing to substantiate the charge. Delhi was bankrupt and Durham probably so before the change in administration. More capital for further development at Delhi was not available under Governor Richardson, but since many farms already piped lacked settlers, any expenditure on more farms would have been to no purpose. The loss of construction jobs and the end of liberal loans were severe blows to that community's morale but such credit as was provided served largely as temporary relief.

Governmental Control.—It is maintained by some that the settlements failed because they were under state management. Such was not the case because the important causes of failure would have operated regardless of the auspices. Only in indirect ways and for a limited number of settlers can government control be held to be a cause of failure. If private parties had made the subdivision, probably collections might have been more stringent. This in turn might have forced some settlers to use greater effort. It seems more probable, however, that under such auspices more settlers would have accepted their losses and left the settlements. The settlers would have had no hope of recompense from private subdividers as they had from the state. Consequently the settlements might not have been developed to the extent they were.
THE DISTRIBUTION OF LOSSES

This hope of recompense was a most important element in the final agreement by which the state withdrew from participation in the settlements. It encouraged the settlers to make their original demands and eventually to force the state to accept almost all losses involved. A number of factors operated to the benefit of the settlers in this matter. The collection policy pursued by the various administrations taught the settlers that an amount due and delinquent did not affect their status. The construction and operation of the irrigation system put the state in a very vulnerable position; its obligation to operate the system became more important than the settlers' obligation to pay their debts. The group nature of the settlements enabled the settlers to bring strong political pressure to bear on the administration. The "promises" of the Board and its officers led the settlers to believe that the state would be responsible for success. While fraud and misrepresentation were not established and while the obligations which a state assumes when it embarks on such an enterprise are not at all susceptible to exact definition, one point was clearly evident at Delhi and Durham: settlers, juries, public, and administration alike did not accept as final the contractual relations that existed between the state as creditor and the settlers as debtors. This point, in conjunction with the responsibilities assumed under the Board's policy of aid and direction, led the state to accept the burden of losses that was sustained.