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REPORT

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Fruit Growing and Truck Farming Commission

**(Pursuant to Joint Resolution No. 1 of the
1909 Session of the Legislature of Hawaii.)**

HONOLULU :
HAWAIIAN STAR PRINT
1910

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Report of Fruit Growing and Truck Farming Commission.

Pursuant to Joint Resolution No. 1 of the 1909 session of the Legislature of Hawaii, which provided for the appointment of a commission to investigate the possibilities and suggest means of improving fruit growing and truck farming in Hawaii, a study has been made of this subject and the present report is made to include the recommendations which seem wise along the line in question.

AGRICULTURAL POSSIBILITIES IN HAWAII.

While much difference in opinion prevails regarding the economic status of many lines of agriculture in Hawaii, there is and can be but little doubt as to the almost unlimited possibilities both in the variety of agricultural products and the season of maturing them in this Territory. Climatic conditions, on the whole, are exceedingly favorable. The range of temperature is very slight, not only from day to night, but from season to season; and the temperature which almost universally prevails is favorable for the growth of tropical crops, as well as for those of temperate climates. The immense variation in the rainfall in different parts of the Islands provides all the different degrees of moisture which are required for the favorable development of various crops. We have, for example, localities in which the rainfall is so very slight that sisal is about the only possible crop which promises successful cultivation. From this extreme of dryness, there are all possible variations in the amount of moisture up to a rainfall of three or four hundred inches per year. The intensity of the heat naturally varies considerably from sea-level to high altitudes on the mountains, where frosts occur in winter, and occasionally, even snow. While all of these facts are sufficiently familiar to the inhabitants of the Territory, their bearing on the possible extension and diversification of agriculture have not always been clearly realized. We have in Hawaii suitable climatic and soil conditions not only for sugar cane, rubber, bananas and other plants which require a high rainfall, but also for pineapples, mangoes, papaias, avocados, coffee, tobacco, corn, cotton, potatoes and other crops

which thrive best in a moderate rainfall; and also dry regions where drouth-resistant crops thrive best.

DIFFICULTIES EXPERIENCED BY THE SMALL FARMER.

Perhaps the most important and most universal difficulty experienced in raising crops in the Territory is that due to insect pests. These pests constitute a serious trouble or menace to almost all of the crops which are grown commercially, and in nearly all agricultural locations in the Territory. Insects everywhere constitute a source of expense to the farmer, but in tropical regions they are perhaps more serious than in the ordinary temperate climate. It is not every year that diversified agriculture suffers to such an extent as to positively discourage the farmer, but outbreaks of serious pests are likely to occur at any time, and frequently happen in such a succession of attacks by different pests that the crop is practically ruined. Notwithstanding the evident seriousness of injurious insect pests, there are effective means for preventing the destruction of the crop by these pests if the known methods are applied promptly and ordinary common sense is used in protecting crops. Parasitic insects have proved exceedingly efficient, and an investigation is being carried on constantly to discover other effective parasites for the control of insect pests which thus far have been without their natural check.

Fungus diseases offer no more serious drawback to diversified agriculture in Hawaii than in the average agricultural region. At times a given crop may be almost totally destroyed over a small area by a fungus disease, as notably in the case of potatoes and pineapples; but such attacks are no more frequent nor more serious than is the case with fruit and vegetables on the mainland and in other countries.

The chief difficulty, which concerns the production of agricultural crops, is found in the nature of the soils. Our soils naturally contain an abundant amount of plant food for the production of good crops. The physical condition of the soil, however, is such that special methods of cultivation are necessary in order to make the plant food available. A large percentage of the soils of the Territory become compacted so tightly as to exclude both water and air from the stratum lying beneath the depth to which ordinary cultivation is carried on. Some of the most serious troubles which have been had in the cultivation of pineapples, and in retaining moisture in the soil for other crops, are obviously due to this tendency of the soil to become so closely compacted as to exclude the air. Under the circumstances, superficial cultivation

does less good than would otherwise be the case, since the deeper portions of the soil are not affected by the superficial cultivation and become gradually more and more compacted as a result of natural settling and of the tramping of horses and mules in cultivating the upper layer.

After the farmer has learned how to prevent the destruction of his crops by insects and fungus diseases, and after he has learned methods of handling the soil so as to prevent it from gradually acquiring very poor physical properties, there still remains the serious difficulty of marketing. To this side of diversified farming in Hawaii we wish to give particular attention in the remainder of this report.

LOCAL MARKETS AND IMPORTATIONS.

It is generally recognized as impossible for any country to become developed to the fullest extent in an industrial way, or to furnish satisfactory conditions for life and proper citizenship until a good variety of crops has been placed upon a business basis. In no other way can a varied population find satisfactory means of livelihood for all concerned and the conditions for happiness and contentment, which are naturally demanded by human beings. Such a status of affairs is still to be realized in Hawaii. One of the most conspicuous features of our Islands is the great extent of apparently waste and unimproved lands. The scarcity of rural population is at present responsible in part for the great extent of real agricultural land which is either not utilized at all, or merely used a portion of the time for grazing purposes. In considering the agricultural possibilities in Hawaii we should bear in mind, therefore, not only the climatic and other conditions which are favorable to the growth of almost all kinds of crops, but also the fact that there is an abundance of land suitable for various agricultural purposes and at present totally unutilized.

It is scarcely necessary to state that there is little use in encouraging the production of crops for which there is no demand; and, therefore, no market. If any one should engage in the production of such crops and meet with the inevitable failure which will await him he would not only become a mal-content himself, but would offer discouragement to others who might have a better scheme for obtaining a livelihood from the cultivation of the soil. It should, however, serve as a great encouragement to those who are interested in the proper development of the Territory, to know that there is a regular and urgent demand on the part of our consuming population for a large variety of farm

produce and that the commission men, wholesale dealers, retail dealers and buying public will take, by preference, Island produce. The statements to this effect, which we have obtained from nearly all of our leading dealers, were not based on a patriotic sentiment which might sooner or later lose some of its ardor, but on the more matter of fact foundation of demand by the trade for products which we can raise in the Territory.

After having heard for some time the complaints which are made by the producer of diversified crops, it seemed wise to investigate the matter, first from the standpoint of the dealer. It was hoped that in this way satisfactory information could be obtained as to what sort of agricultural produce is demanded by the trade, and therefore, desired by the dealer; also the regularity with which it can be obtained, the uniformity in quality of the product offered for sale, and particularly, the attitude of dealers toward Island produce, as compared with that imported from California and other parts of the mainland.

It is of no particular importance to the purposes of this report to determine exactly the value of produce now imported from the mainland and which could be grown in Hawaii. The value of such produce varies from year to year, but runs into the hundreds of thousands of dollars. While the idea of a complete independence, as regards food supply, is attractive from a theoretical standpoint, it should always be remembered that no country can long carry on a satisfactory trade with other countries without being both a seller and a buyer. In developing a satisfactory market it is necessary to have something which is in demand and is satisfactory to the trade, and also to have certain demands for other produce or materials to be bought from the other party in the trade relation. While, therefore, there may be the possibility of growing almost any agricultural crop in Hawaii, it is scarcely conceivable that everything can be produced here more economically and more advantageously than anywhere else. The rational system of procedure for our farmers, therefore, is to determine those things which can be advantageously grown here, in consideration of our present markets, and to devote their attention to them rather than to the problematical business of producing materials which can, at present, be laid down in Honolulu more cheaply than they can be produced upon our agricultural land.

It would not be possible to state accurately the relative advantage in the production of the various crops which are now grown in small quantities and sold on our local markets. Some of these materials are at present supplied to nearly the extent demanded by the trade; others are decidedly deficient. Some are furnished

with a quality which leaves little to be desired; others are quite below a proper market standard. Some are shipped in a satisfactory sort of package and attractively packed, while others are sent to market in a careless and unattractive condition.

The sweet potatoes which are sent to the local market are sadly lacking in uniformity of shape, color and flavor. Sweet potatoes are not imported from the mainland and the local market is, therefore, exclusively in the hands of local producers. They have been repeatedly assured that ten times as many sweet potatoes as at present could be handled in Honolulu if they were supplied regularly and in uniform condition. Some of the producers have been repeatedly informed of this fact, but they have not given sufficient attention to the matter and have, therefore, not met the demands of the trade. It is impossible to force a product upon the public in a condition in which they do not want it.

Tons of dried beans of different varieties are annually imported, and all of these could be raised profitably in Hawaii. The mangoes, avocados and papaias, which are offered on the local market, are also sadly lacking in uniformity, some of them being delicious in flavor, and others barely fit to eat. The local demand for jellies, jams, chutneys, pickles, taro flour and starch is fairly well met at present by local production. A little more business energy put into this line of industry, however, would make it possible to secure a profitable outlet for such materials on the mainland. This would, in turn, make possible certain improvements in manufacture and in the ultimate quality and appearance of the product. As a matter of fact, the demand for all the materials just mentioned is increasing slowly. Rhubarb and celery are now furnished the year round to certain local dealers, and the rhubarb, at least, is received in Honolulu in a much better condition than that which comes from the mainland, and is satisfactory in every way. The celery produced in the Islands usually wilts a little too soon, but is tender and of very good flavor. It is doubtful whether the producers here would care to meet the price of imported celery during the winter season.

While all parts of the Islands are suitable for the production of citrus fruits, we import large quantities of oranges, lemons and grape fruit, of no better flavor than those which can be easily produced here. It is unlikely that for some time the local market for limes and grapefruit could be over-supplied from local production, even if a number of fruit growers went into this business. Both our limes and grapefruit are superior in flavor to those which can be secured by importation. Moreover, some of our

seedling oranges are of exceptionally good quality and seedling oranges of fine flavor can be produced here.

While complaints are sometimes made about the market for locally grown corn, the actual requirements of the market are not met by our local producers. Tons of corn are imported from the mainland and from Manchuria to supply the trade. A part of the trouble experienced by local corn growers is due to their inattention to the requirements of the market, and to a lack of business methods in handling and shipping their products. Our corn growers can meet the prices of corn imported from Seattle and Manchuria and still make a reasonable profit at the business.

As already indicated, the demand for beans is not satisfied by local production, and if a great increase in the production of beans should occur there is a ready outlet for any surplus of dry beans on the mainland. The possibility of exportation of beans to the mainland is practically unlimited. At certain months of the year, particularly from December to June, a much larger quantity of onions, than is now raised, would be welcomed on the local market at about 3 cents a pound. Moreover, garlic, which could also be readily grown in Hawaii, is imported at the rate of two tons per month and sells for about five cents per pound.

Eggs, fowls and turkeys are not produced in quantities sufficient to supply the local market, notwithstanding the fact that they bring high prices the year round and therefore offer exceptional inducements to poultry raisers. At present, turkeys bring about the same price as a sheep and can, of course, be produced more cheaply than the latter. The market for some of these products takes whatever is offered and asks for no more. The supply, however, could be greatly increased with no fear of overstocking the market. It is impossible to secure enough locally produced eggs to supply local demands, and the quantity needed, in addition to the local supply, is imported in the form of less satisfactory case eggs.

It seems unnecessary to specify further in this report particular instances of products which can be grown at a profit in Hawaii, but which are not now grown in a sufficient quantity to supply even the local market, without considering the possibility of exportation. The point which should perhaps next be discussed is that of the comparative standing on the market of local and imported produce.

LOCAL DEALERS.

Before any systematic efforts can be put forth to increase the production of truck crops and fruits it is necessary for the producer to know something about how his produce will be received on the market. In order to get some first-hand information on this point, interviews were held with the leading grocers and commission merchants of Honolulu. It was found that a very gratifying uniformity of opinion is held by all of these men. They prefer to handle Island produce, rather than imported produce, if the former can be obtained in satisfactory condition and with regularity. No prejudice was found to prevail anywhere against Island produce; on the contrary, the trade takes kindly to it and asks for it by preference. It is easy to understand why this condition should be true. There is a natural sentiment among dealers and consumers in favor of using home-grown products. This sentiment alone, however, would not carry us very far if the quality of home-grown produce were not satisfactory. It is possible to obtain fruits and vegetables in better condition from island sources than from the mainland. While the methods of cold-storage have been so perfected as to enable most perishable materials to be carried for long periods in good condition, nevertheless, materials carried in cold storage deteriorate rapidly upon being exposed for sale. The delicacy of flavor, which characterizes perfectly fresh fruits and vegetables, is soon lost and the materials soon begin to wilt and lose in appearance, as well as flavor. The one serious trouble for the dealer in Honolulu in handling Island produce is the irregularity with which it arrives in the city, and therefore, the uncertainty of obtaining a constant supply which will meet the needs of the trade. For this reason, dealers are forced to import fruits and vegetables in order to protect their own business. There is no other way of overcoming the constant differences, which tend to appear between the supply and demand, except by having the supply for the city of Honolulu come to one point where it can be held and from where it can be distributed to dealers.

MAINLAND MARKETS.

Thus far we have spoken only of local markets; and evidence has been presented to show that even the demands of our local markets are not met by the present local production of fruits and vegetables. If, however, a method should be adopted for hand-

ling and distributing these products locally, so that reasonable profits are obtained by the producer and increased production is encouraged, the producer will naturally not wish to be limited entirely to the local market, but will seek encouragement for greater production in the broader outlook which will be furnished by mainland markets. There are many of our fruits and vegetables which could be marketed with satisfactory profits on the mainland if the difficulties attending the transportation of these products could be overcome. There is no fundamental reason, for example, why Hawaii should not occupy the banana market of the western coast of the United States. We are most favorably located for supplying this market, and there is an abundance of land on which the soil and climatic conditions are favorable for the growth of bananas. Nevertheless, difficulties have been experienced in marketing this fruit at a profit in San Francisco and other western cities of the United States. Actual losses have been experienced in numerous instances in attempting to ship this fruit, these losses being due, in most cases, to the antagonism of other fruit interests and a lack of intelligent effort in pushing the claims of Hawaiian fruit. With pineapples there is another cause of failure which at present is too serious to allow any recommendation for shipping this fruit to the mainland. It is hoped, however, that the difficulty may be overcome. The one serious trouble in shipping pineapples to the Coast is the prevalence of pineapple rot. The losses from this disease were so extensive during the past year that all who engaged in the shipment of fresh fruit have been discouraged from continuing that part of the pineapple industry. It is admitted on all hands, however, that if a really practical method of controlling the disease can be devised the shipment of fresh pineapples will be resumed with reasonable assurance of good profits. It has already been mentioned that a large demand for beans exists in various western cities, and could be profitably supplied from Hawaii. Moreover, as soon as large quantities of uniformly good mangoes and avocados are produced, they can be marketed with profit on the mainland. At present the supply of the best fruits of these kinds is taken up by local demand. With the establishment of suitable cold-storage facilities in the boats plying between Honolulu and San Francisco, papaias could be successfully marketed in the latter city, and the demand for this fruit would grow rapidly as people became acquainted with its good qualities. Moreover, onions and sweet potatoes can be produced here during the off season on the mainland and marketed so as to supply the demand for these vegetables during the vacant interval in the mainland supply.

INDEPENDENCE AMONG FARMERS.

Too much has been said by way of encouraging a false idea of independence among farmers. The farmer is, in the proper sense, the most independent of all professions, but until recently he has been too independent in the sense that he has refused to recognize the imperious necessity of combining for his own good. Perhaps the most conspicuous feature of all modern business is the combination of related interests and of numerous individuals, in order to cheapen the cost of production, sale and transportation of products; and in order to make it possible to secure a large market outlook for the produce of each concern. In this movement the farmer has lagged behind all other professions, but within the past few years the establishment of co-operative associations among farmers has brought such conspicuous success that organization along this line is progressing rapidly. At first co-operative movements among farmers were poorly organized and their methods were ill-advised. Such associations, therefore, had short and precarious lives and left discouragement in their wake. At present, however, these associations for co-operative purposes are being established on a business basis with a better understanding of the purpose of the organization and with more certainty of rational management and success. There are now in existence on the mainland about 80,000 co-operative associations among farmers, including a membership of more than three million farmers. Nearly every line of agriculture has been organized on a co-operative basis and wherever these co-operative organizations have been established the best financial success has been accomplished by the farmers concerned.

ADVANTAGES OF THE CO-OPERATIVE MOVEMENT.

The chief advantage of co-operative associations, from a business standpoint, is that it enables the farmer to meet the present demands of the trade in agricultural produce in the way in which all other lines of industry are carried on. Traffic in fruit and vegetables, as well as in other agricultural products, is not carried on at present in terms of quarts, dozens, bushels, or even wagon loads; but in crates, tons, car-loads and cargoes. It is obviously impossible for one farmer, unless he has control of a large area, to furnish any kind of farm produce in quantities which would appeal in a business way to dealers or to transportation companies. If the farmer has but a few crates or bushels of produce or a few dozen eggs to sell, he cannot secure favorable rates in trans-

portation, nor take any dignified business standing with the dealer to whom he sells his produce. There are but two ways in which business can be conducted on a scale commensurate with the demands of modern trade, namely, by corporations and by co-operative associations of individuals.

The lines of agricultural work in which co-operation has been successfully established among farmers include almost every possible kind of agriculture, and almost every operation more or less connected with the farm. We may mention, by way of illustration, co-operative creameries, cheese factories, syrup mills, potato growers, fruit growers, hay growers, cotton planters, grain elevators, egg producers, poultry producers, bacon factories and similar associations among all other lines of agriculture.

The various attempts which have thus far been made in putting co-operative associations among the farmers on a successful business basis, have not always been attended with success. In fact, failure has come as frequently as success from these ventures. The essential conditions of success are: first, a mutual confidence among the individuals who enter into the co-operative association; second, the selection of men with really clever business ideas for the management of the association; and third, the serious study of the demands of the market in order to be in a position to meet these demands in the quality of the materials produced and in the method of packing. Perhaps the one factor which has caused more failures than any other in co-operative associations among farmers, is the lack of confidence among themselves. Farmers have been notoriously suspicious of one another and have been unwilling to trust the management of their co-operative associations to the members which they have themselves selected. As long as such mutual suspicions and lack of confidence prevail, the life of any co-operative organization is doomed within a short period. In Hawaii there are peculiar difficulties of this sort, due to the great variety of races with which we have to deal. To the mutual suspicions which are felt between members of the same race, we have the added suspicion and antagonism which is so often shown by one race toward another. For the present, at least, it must remain quite doubtful whether co-operative organizations can be successfully established and maintained in which several races are involved. It may become necessary, at least temporarily, to attempt the formation of some sort of organization almost exclusively along the lines of race, and the nature of the crop produced. This would not furnish as many difficulties as might at first thought be supposed, for rice production is largely in the hands of the Chinese, corn and grapes largely in the hands of Portuguese, and taro and sweet potatoes

in the hands of Chinese and Hawaiians. There seems to be no good reason, however, why it should not be possible ultimately to combine all races concerned in the production of truck crops and fruit in a given locality.

One of the far reaching effects of co-operative associations among farmers is to be sought in the educational influence of such organizations. The farmer is often too prone to neglect study along the line of his own business. Without encouragement and stimulus of associates, lines of reading and study once taken up may be abandoned and old methods are persisted in without an attempt at improvement. Our federal and state governments have for years provided more liberally for agricultural investigation than any other country. The results of these investigations are published and distributed gratis throughout all the states and territories. The bulletins, circulars and reports of the United States Department of Agriculture and Experiment Stations constitute together an enormous mass of literature relating to all lines of agriculture. Some of the more technical publications are not for general distribution, but the most of this mass of literature is to be had for the asking, and those bulletins and reports which relate to the lines of work of each particular farmer should be in his home library. Too often, however, it happens that individual interest is manifested in agricultural investigation merely long enough to write for bulletins and reports on subjects in which the farmer in question is interested, but the interest may end here and the bulletins and reports may not be read. With the establishment of co-operative associations an added impetus is given to the study of such literature. At the regular meetings which such associations may have for business and educational purposes, discussions are held on important publications relating to the business in hand, and these publications bear fruit in their application to actual farm conditions. The farmer himself is the final judge as to the applicability of agricultural research to his own conditions, but unless the available literature is studied, with this idea in mind, the suggestions in such literature are made in vain and lie concealed in the home library. The United States Department of Agriculture, State Experiment Stations and State Departments of Agriculture have long shown a willingness to make special efforts toward providing sets as complete as possible of their publications for the use of any associations of farmers which have educational objects in view.

Another immediate effect of associations among farmers is concerned with the improvement of the status of social conditions on the farm. Persons who were born on farms and have grown up under the conditions furnished by farm life, have naturally be-

come accustomed to the somewhat restricted social advantages and are not much disposed to complain. The influx of city population into farming districts has, however, added a disturbing factor in that complaints are at once made regarding the absence or limited extent of social possibilities under farming conditions. In cities and villages there are so many occasions presented, without effort on the part of the populace for gathering together and enjoying the educational and social advantages thus presented. In farming communities the occasions for such social intercourse must be provided by the persons concerned. To this end co-operative associations are admirably adapted, for the reason that they furnish several inducements for a closer and more fraternal association of the citizens of each neighborhood or district. If there are good business, social and educational reasons for meeting together at stated intervals to discuss those matters which most vitally concern the neighborhood in question, interest is not likely to wane in the fraternal association.

One of the most conspicuously weak points in the attitude of the farmer toward his own profession is his lack of business methods. The farmer has always been a producer content to let the other men distribute his products to the consumer. Even when the farmer has been induced to study thoroughly the science of production he has still too often neglected the business side of the question. With the establishment of our elaborate system of agricultural research, the farmer has learned much to enable him to increase the yield of his crops and to control insects, diseases and unfavorable soil conditions which tended to reduce production. In the meantime, however, others have reaped the benefits of his skill and industry. Some of the largest fortunes of the world have been made in the speculative and legitimate distribution of the products of the farm. At last it is beginning to be recognized that the farmer can, to some extent at least, control the distribution of his own products and prevent speculation in them. The ordinary farmer cannot ship his produce in car lots or cargo lots. He, therefore, cannot get favorable transportation rates and cannot become a factor in controlling the market. He offers his produce in small quantities, and often in an unattractive form. The result is that he must beg for buyers, spend valuable time in making sales, and finally sell at a sacrifice.

In this age of unusually high prices it may seem ill-advised to ask why the farmer should ever fail to get a remunerative price for the things which he has to sell, for all farm products are absolute necessities and the usual reason for the prevalence of unprofitable prices is that the farmer does not control the distribution of his products. Food products hauled to town in a farm

wagon and stationed in some out-of-the-way place about the market do not bring good prices because the majority of farmers do not know how to market their produce in an attractive manner. The result is that the buyer prefers to go to the regular dealer and pay his added profit.

The number of links in the chain of distribution of farm products has been increased beyond all reason, with the result that the consumer pays too much for the farm produce, and the farmer receives too little. The only obvious way of improving these conditions consists in eliminating the excessive middle profits and bringing the farmer and the consumer nearer together. The immediate results of such a movement are that the producer gets more for his share of the work, the consumer pays less and the quality of the product is improved. As an illustration of how these results have been brought about, we will mention a co-operative woolen mill, which has been in operation for many years in New Mexico. This co-operative association includes among its members both the consumers and the producers of wool. About two million pounds of wool are annually manufactured into clothing, blankets and other woolen products at the mill. Woolen suits, guaranteed to be absolutely pure wool, are made to order by the best tailors which can be found, for \$15.00 a suit. A suit of corresponding quality in an independent tailor shop costs from \$30.00 to \$35.00. Notwithstanding the fact that the price is thus cut in half by the co-operative concern, the profits from the manufacture of clothing at this greatly reduced price amount to thirty-three percent annually. The cost of the production of clothing in this case has been reduced by the elimination of middle-men's profits. In the co-operative woolen mill in question the wool is received from a wool growing member of the co-operative association, and is directly manufactured into clothing, without passing through any other institution. The cloth used in the manufacture of clothing in the shop of the independent tailor of the same town, however, goes through a large number of hands and makes a long journey back and forth across the country. In the first place, a buyer comes from an eastern wool broker, usually located in Boston, to the far West and bids on the wool produced by the sheep raisers. The expenses of this buyer, even to the cigars which he furnishes the sheep raisers, are ultimately paid for by the man who buys the suit of clothes from the independent tailor. After the wool is purchased it is freighted across the country to Boston or Chicago, where it passes through two or three companies before it is finally turned over to the woolen mill. From the woolen mill the cloth is distributed to wholesalers, from them to distributors who ship it to dry goods merchants located

in the district where the wool was originally produced. The woollen cloth must, therefore, be transported again over the same two or three thousand miles of journey which the wool originally took. From the dry goods merchants the tailor buys his cloth to make suits of cloths. At every step in this complicated journey of the wool, from the sheep's back to the man's back, a profit has been added by each dealer through whom the material was passed, and the consumer must ultimately pay the whole bill. The elimination of unnecessary links in the chain of distribution has enabled the co-operative woollen mill in question to reduce the price of clothing by one-half and still make a large profit for the co-operative stock-holders.

It is desirable for farmers to get together, not alone for the purpose of learning how their products are distributed and who is getting the profits from this farm produce, but also to study business methods of marketing. Farmers have been and still are very negligent in this regard. Produce is sent to market in carelessly made crates, and without thought of the appearance of the product when it reaches the market. The price of farm produce, however, depends to a large extent upon its appearance when viewed by the prospective consumer. If the packages are untidy and the products not crated to secure uniformity a disagreeable impression is produced and the consumer looks elsewhere to make his purchase. With the establishment of co-operative associations men are found among the members of the association who have the proper training and ability to take the leadership in directing the methods of packing, marketing and distribution of the products of the community, so as to get these products upon the market in a satisfactory condition and to obtain reasonable profits for the original producer. As has been demonstrated time and time again, this can be accomplished without increasing the price of the product to the ultimate consumer; in fact, the final retail price may be lowered and the price paid to the producer increased by a reduction of the unnecessary middle profits.

Co-operative associations are of the greatest business significance to the farmer, not only in showing how to market his produce better, and therefore obtain more profit from his farm operations, but also in enabling him to buy farm machinery, fertilizers, furniture and other material at a better advantage. In other words, these associations naturally operate both in the line of selling and buying co-operatively. The business of the merchant in the city is calculated to make him a profit for the simple reason that he buys at wholesale and sells at retail prices. The farmer, on the other hand, has always sold his produce to commission men and wholesalers and, of course, at wholesale prices, while every-

thing which the farmer has bought has been obtained from retailers and at retail prices. Co-operative associations among farmers have already shown, however, that the farmer by combining can purchase those materials which he has to have upon the farm, at wholesale prices, and by taking in his own hands the means of distributing his products can sell them at retail prices. In other words, the profession of farming is thereby put upon a rational business basis with the assurance of reasonable profits. The only explanation of how the farmer has been able for these many years to sell at wholesale and buy at retail prices is to be sought in the natural fertility of the soil, which, for a limited time, at least, has produced crops without asking any return. As soon, however, as it was thoroughly appreciated that to impoverish the soil was a suicidal farm policy, and that money and time must be expended in maintaining fertility, business methods had to be adopted in order to avoid inevitable bankruptcy. The principles of business methods are essentially the same whatever the business concerned. It is obviously necessary to understand as thoroughly as possible the market which one seeks to reach, the requirements which must be met upon this market, and every method of reducing expense from one end of the chain of operations to the other.

PROPOSED PLAN FOR ENCOURAGING FRUIT GROWERS AND TRUCK FARMERS.

We have already attempted to present the attitude of business men on the question of how to encourage diversified agriculture in a substantial way, and how to put it upon a profitable basis. It has been shown that dealers have demand for more agricultural products than are now produced in the Islands, and would prefer to handle Island products if they were presented in the way the dealers wish to have them, and in quantities to satisfy the demands of the trade. The problem is, therefore, now passed along to the producer to do his part toward the improvement of his own business. Are we to suppose that the producers will go on in the old way, taking such returns as can be secured for the produce which they ship at irregular intervals and in carelessly prepared packages; will they continue to maintain that there is neither prospect nor encouragement for growing miscellaneous crops; will it still be contended that co-operation or mutual association of whatever nature, is impossible on account of the sparseness of our population and the mixed nature of the races with which we have to deal? If this be the case, there is indeed little hope to hold out to the small producer. There is little prospect of pre-

venting a man from committing suicide if he is determined to do so. No one can assume that the Government owes him a living, nor can he reasonably expect some one else to work out his financial salvation. The producers must take a hand in their own affairs, and must manage their business in a satisfactory manner if success is to be expected.

Examples have been given of satisfactory co-operative enterprises which are now in operation among farming communities. As a result of this method of managing the marketing end of farming a financial success, hitherto unknown, has been brought about. The results already mentioned along this line have all been accomplished by co-operative effort of private individuals associating themselves together for mutual benefit and without Government assistance of any sort. If it still be felt that under our conditions it will be impossible, for some time at least, to establish a co-operative marketing scheme for miscellaneous agricultural products by the combined efforts of individual growers alone, even that objection on the part of growers should be abandoned, for it seems desirable to recommend that the Territorial government give some assistance in establishing this movement. The Territorial assistance, however, should be granted only temporarily with the idea that it will be withdrawn as soon as the enterprise can stand on its own feet.

If a portion of a wharf, convenient for the Inter-Island steamers, were set aside for the reception of such miscellaneous products as can be used in Honolulu or be shipped to the mainland; and if this government warehouse, as it might be called, were put under the supervision of a practical man on a Territorial salary, it is believed that such an experiment would receive the support of our small producers. If so, the business problem, which now faces them, can probably be solved and the increased profits from such an arrangement would ultimately make it possible for the enterprise to be taken over by the producers themselves, without further Government assistance; or by a private individual or company who would operate the warehouse for the convenience and benefit of producers and dealers. In order that such a plan might have even the hope of success, it is necessary for the small producers to enter into the experiment with willingness; if not, the plan will inevitably fail for the reason that unless a good quantity of produce is thus brought together in one warehouse, the material will not pay for the maintenance of the necessary machinery of distribution and there will not be enough material to supply the needs of dealers who would come to the wharf to make purchases.

It has already been shown that the demand in Honolulu considerably exceeds the supply in eggs, fowls, turkeys, sweet potatoes, corn, beans, onions and various other crops which can readily be purchased here at a profit. At present the materials of this sort which are furnished to the Honolulu markets come at irregular intervals, in irregular quantities, and, for the most part, in an unsatisfactory condition. If all of this produce were delivered to one point it would be far easier to formulate information as to the deficiency of the supply in different products, as to the times when it is needed and the methods of packing which will best preserve the produce and give it the best appearance when it reaches the market. The dealers and commission men of Honolulu have signified their preference for buying produce of a miscellaneous nature at one point where a uniform price can be established, and where, therefore, all dealers would be on an equal footing. If a wharf, maintained temporarily at least under a Territorial official, were established to receive all of this produce it would be a simple matter to notify the trade promptly of the quantity and condition of produce on hand and thus secure its prompt distribution. If all dealers are put upon the same basis in buying this produce, the dealers will be willing to give more for it than at present for the very reason that they will thereby feel assured that all dealers are treated alike; and that there is no likelihood of one dealer receiving a consignment of material at a much lower price than other dealers have succeeded in obtaining.

The necessity of better methods of marketing and distributing miscellaneous farm products has long been recognized by the agricultural experts of various countries. The requirements in different localities have been met in different ways. Wherever sufficient interest in agricultural co-operation has been established the marketing of crops and the business end of farming have been placed on a satisfactory basis. Results have by no means always been accomplished without difficulty; in fact, at times only after repeated efforts has anything like a successful organization been brought about. Particularly in the Australian Colonies, the Government has lent a hand in the better marketing and distribution of crops. Market places have been established by the Australian Government, and more or less responsibility assumed in the sale and distribution of the products. These experiments in marketing under government supervision in Australia have yielded results far better than were expected by the advocates of co-operative marketing.

At the last session of the legislature our territorial lawmakers manifested an active interest in offering substantial encourage-

ment to the establishment of better marketing facilities for the small farmer. The means were provided for making such an experiment in accordance with plans to be provided by the present commission, appointed for that purpose. The territorial government, therefore, stands ready to give its assistance to the project in hand and, as already shown in this report, the dealers in Honolulu desire to see such a method of marketing established. They consider that under such a system the problem of obtaining miscellaneous farm products would be considerably simplified, in so far as their interests are affected. In order, however, that a Government wharf for the reception and distribution of miscellaneous farm products under territorial supervision should be set aside and maintained with success, it is necessary to have the co-operation of the producer. An attempt is now being made to make known to our farmers the essential features of the proposed scheme of marketing and distribution, and to enlist their active interest in the improvement of their own conditions.

Respectfully submitted,

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