PRELIMINARY MEMORANDUM ON RESULTS OF THE AGRICULTURAL SURVEY OF CUBA February-March 1941

Habana, March 15, 1941

This is an attempt to summarize our findings to date, as a basis for further discussion and as a preliminary to our talk next Monday with the American Ambassador.

The memorandum of January 10, prepared at Washington, states that we are to study: (1) the promotion of rice production in Cuba; (2) irrigation works; (3) new crops for export, and (4) rural rehabilitation. It was further stated that we would, in addition to the above, investigate all of the proposals for agricultural development which were made by the Cuban Economic Mission.

These were the instructions we received until we called upon the Ambassador, who emphasized particularly the subject of diversification. The Ambassador made it plain that he desired our studies to result in concrete recommendations for practical assistance along agricultural lines.

Having in mind this last point, we have attempted to review the entire situation in a comprehensive manner. Our general conclusions, subject to revision in some respects when we complete the work, are as follows:

(1) Diversification Program. We believe that a program of agricultural diversification, with special attention
attention to irrigation and the production of rice, can and should be undertaken without delay. We feel that this program offers much hope, in so far as regards production of foodstuffs to be consumed in Cuba; but we feel less optimistic regarding development of new export crops on a large scale. We consider that there are good possibilities of expanding production of certain present crops, and the establishment of a few new ones. The latter, however, will have to go through a fairly long period of experimentation before they can be placed upon commercial footing.

As a necessary corollary to the diversification program, we consider that extensive studies should be made regarding the possibility of obtaining water for irrigation from both surface and underground sources throughout the Island. Some rainfall data are already available concerning possibilities of utilizing the rivers, but data on stream flow are scanty. Therefore, hydrologic studies should be undertaken and continued for a sufficiently long period to provide reliable data on rainfall, run off and ground water conditions.

Although the present data on water supply is incomplete, we believe that the rice industry can and should be expanded with the least possible delay, with a view to producing half the present Island consumption of rice—which is the objective set by the Cuban
the Cuban Government, it being desired through ade­quate safeguards to continue purchasing half from the United States. The sum of $2,789,575 which has been suggested by the Cuban Government as necessary to developing the rice industry we think may be larger than the initial requirements of the work, inasmuch as the feasibility of several of the irri­gation projects enumerated in the memorandum of the Cuban Economic Mission cannot be determined at this time owing to inadequate hydrologic data.

We feel that there are possibilities of rehabili­tating the banana industry and placing it upon a sound footing (which it has not hitherto enjoyed) through conducting experiments in various parts of the Island to determine the suitability of soil, the feasibility of irrigation, and to develop proper cultural methods and control of Sigatoka disease.

We consider that there are possibilities of increasing the exportation of cassava or yuca starch to the United States, but we are not optim­istic regarding the possibility of cultivating successfully in Cuba rubber, quinine, abacá (Manila hemp) and several other crops which have come up for consideration. We recommend further experimenta­tion for such possible export crops as tung oil, ramie, kapok, castor beans, long staple cotton and kudzu for seed for export to the United States and
for forage for Cuban cattle.

If it is in line with our Government's policy, we see no reason why the cattle industry should not be expanded with a view to supplying beef to North American and perhaps other markets.

In connection with increased production of foodstuffs for domestic use, we consider that the efforts already made to establish commercial production of edible oils merit the highest commendation, and believe that this work should be continued with the view ultimately of supplying local needs. We feel that Cuba can and should produce all the potatoes, beans, onions, and garlic required for local use. The realization of this objective will be facilitated if the program recommended by the Cuban Economic Mission for the construction of storage warehouses is carried out. This program involves the expenditure of $620,000.

(2) Reforestation. We consider the time ripe for the inauguration of a sound reforestation program which is of the utmost importance from the long range point of view. Together with Cuban officials we have worked out a program which we believe to be conservative and adequate for the next five years. The program would be based principally on planting cedar, mahogany and teakwood trees. This would be only a moderate beginning on a trial basis the scope of which should be rapidly expanded as soon as results warrant it.

(3) Rural
(3) **Rural Rehabilitation.** The problem of rural rehabilitation has come in for much study and we cannot see that the program recommended by the Cuban Economic Mission, involving an expenditure of $3,000,000, is justifiable at this time. We consider that the most effective approach to this problem is through the sugar mills and larger colonos, since the bulk of the people who would be affected by such a program are some 200,000 laborers in the sugar industry. Intensive work along the lines already tried at Baragua and Preston seem to offer the best hope of accomplishing results of the kind desired. We suggest further study to develop some suitable means of confirming the laborer in his right to reap the results of his efforts—that is, some scheme which will insure his occupancy of the land subject to such use of the land and cooperation as may be deemed appropriate. As regards resettlement work of the conventional type, the Cuban Government has already distributed lands to some 700 or 800 settlers and we believe it would be advisable to see what sort of directional assistance is developed for these people, and what results are obtained before going further with this program. In the meantime we believe that some of the money could be more usefully employed in acquiring equipment for improving dirt country roads. This work should be carried out by the Department of Agriculture.

(4) **Agricultural**
Agricultural Credit. Considerable time was spent in discussions with Minister López Castro, Senator Compte and Dr. Oscar García Montes, dealing with the question of the amount of agricultural credit that would be required in order to provide adequate production, or commodity credit in connection with the proposed program of agricultural diversification.

The requirements as stated in the memorandum of the Cuban Economic Mission amount to $13,999,785. Of this total, $8,354,785 are estimated to meet the needs of sugar cane colonos who, it is claimed, find financing through existing channels either difficult or expensive, and the balance, $5,645,000, for other agricultural products such as tobacco, coffee, rice, fruits, vegetables and cattle, for which credit facilities are inadequate in some cases, and nonexistent in others.

The requirements for sugar cane are based on the assumption that one-half of the sugar cane production for a crop of the size of the 1939 crop would require financing to the extent of two arrobas of sugar. On the basis of the 1939 promedio the value of one-half of the 1939 crop would amount to $23,870,816. The minimum price of cane is 5-1/2 arrobas. Of this total, 2 arrobas are required for cutting and hauling. This is paid by the mills as the cane
the cane is delivered. Of the remaining 3-1/2 arrobas, 2 are estimated to be needed for cultivation, and 1-1/2 for capital costs and amortization. It is proposed to finance cane growers to the extent of the 2 arrobas for cultivation expenses, which would leave 1-1/2 arrobas as a margin of safety, if the colono is not indebted to the mill. Since the 2 arrobas for cultivation represent approximately 35% of the minimum price of cane, the estimated requirements were fixed at $8,354,785. In view of the fact that this estimate is based on the assumption that one-half of the growers wind up the crop without owing any money to the mills, it was decided that data should be obtained from a representative group of mills to determine whether the assumption is warranted. Should the data confirm the assumption, the further question of the probable size of future crops would have to be considered. The 1939 crop amounted to 2,749,307 long tons of 96° sugar. It is doubtful that the present outlook would justify an estimate for agricultural credit based on a crop of that size.

Subject to the qualifications mentioned with respect to cane, the estimated requirements for agricultural credit do not appear excessive.

The most immediately effective and practical assistance we could render would be the financing of an
of an extensive system of roads to provide better communications for rural districts whose agricultural development is dependent upon better means of communication. This program we consider to be a basic necessity. It has the further advantage that a program of road building throughout the Island would provide work during the much-talked-of "dead season" for many laborers.

We have studied the road program of the Cuban Economic Mission submitted in connection with the $50,000,000 loan, and we believe this program is, in general, sound. It calls for a total expenditure of $10,550,000, which sum we think not excessive. We believe it would be wise for our Government to finance this program, but we believe it should be done on some such basis as the following: Cuba would request the cooperation of a Roads Commission to be furnished by our Government. This Commission would approve each project, both as to location and as to kind of road to be built before the work was commenced. Money would be advanced from time to time as units were completed to the satisfaction of the Commission, and continuance of the program would depend upon their recommendations.

SUMMARIZING THE ABOVE, our major recommendations for providing prompt and practical assistance to Cuba along agricultural lines are that (1) We should cooperate
cooperate in the development of irrigation works which will make it possible for Cuba to produce one-half the rice consumed in the Island; (2) we should further assist in diversifying the Island's agriculture by facilitating experimentation looking toward rehabilitation of the banana industry, and the development of other export crops such as Cassava starch; (3) we should further the development of foodstuffs for domestic use through providing funds for building storage warehouses which will make possible the provision of such crops as potatoes and beans throughout the year; (4) we should cooperate in the development of a sound reforestation program to be started on a modest basis; and (5) the United States should cooperate with Cuba in carrying out a comprehensive road-building program designed primarily to facilitate agricultural development of areas now lacking good means of communication with the Island's centers of population.