



PD-AAA-967-A1 MONTHLY ACTIVITY REPORT

JANUARY 1977

PROJECT: 521-15-190-069 THE J.G. WHITE ENGINEERING CORPORATION  
HAITI Irrigation 4792

I INTRODUCTION

Staff level of the J.G. White Engineering team remained at December 1976 level. The arrival of two additional members was anticipated early in February.

DARNDR personnel completed their Christmas - New Year holidays on 2 January with field work starting on 5 January.

II GENERAL ACTIVITIES

Due to the legal holiday period which began on December 18, 1976 and extended through January 2, 1977, the Dubreuil rehabilitation project was not fully reactivated until January 5. This three day lag was necessary in order that work groups could be notified and assigned, equipment and materials which had been stored during the holidays could be moved to the operational sites. During the period of January 3rd and 4th, grade lines were laid out for the relocated section of the main canal through the spring area.

The return of Engineer Philippe Lamour to the project at mid-month after a prolonged illness eased to some extent the pressure on

Engineer Hughes Bien-Aimé, civil engineer-construction. Lamour has concentrated on interpretation of design work and coordination of the survey parties. [No new design work has been completed because of lack of sufficient survey personnel. The one qualified surveyor is assigned to the Dubreuil project for only 50% of his time. Design work can, of course, only proceed after proper surveys have been completed.] The completed designs currently available are adequate to carry on construction at the present pace. [More emphasis will have to be placed on surveys, specifically to obtain profiles and cross-sections of the remaining secondary canals which are to be restored. Officials at Damiens have recognised the need for a full time assignment of a surveyor to the Dubreuil Project and Mr. Edouard, Director of the Irrigation Division (DARNDR) has promised speedy action. At month's end it was reported that Engineer Lamour would no longer be available to the project. Such a loss to the project will necessitate early replacement of an engineer with similar capabilities to provide required design capability.

[Transportation of materials continues to be a serious problem. With only one dump truck available, there are many and varied demands for its service. For example, this truck is the only vehicle capable of hauling the cement requirements from Aux Cayes to the project depot. Loading, hauling and discharging the cement generally requires from 3 - 4 hours. Thus, half a day of hauling time is lost. The problem of inadequate material transport capability was called to the attention of Mr. Edouard who has promised to take the necessary action to assist the project to obtain the use of an additional dump truck.

By the end of the month, excavation for the by-pass over-land section of the new canal at the Springs area had been completed. Grade stakes were positioned, and foundation rock was stock piled in sufficient quantities to allow construction of the new sections of masonry canal to progress satisfactorily.

At the same time excavation of canal 5.9 - 2.8, commencing at Berault, was started and foundation rock was being placed. Provision of water for use in mortar-mix and for compaction of earth sections of the Berault secondary canal, and all subsequent earthen canals poses a problem considering the present equipment available to the project.

Transporting water for these purposes is an expenditure requiring equipment not envisioned in the original feasibility study. Plans are currently underway to correct this problem by using a small tank trailer pulled by draft animals. Consideration of this item should be given to similar requirement in other planned projects.

Hand screening of sand and gravel is proving too expensive a means of obtaining high quality construction materials. The use of water power to achieve the same results will be incorporated into the Dubreuil operations in mid-February. This will release manpower for continuing canal clearing operations and starting of repairs of masonry sections in the main and secondary canals.

REHABILITATION OF DUBREUIL PROJECT

JANUARY 1977 REPORT

Contrary to the preceding periods, rehabilitation at Dubreuil progressed at an accelerated rate, in spite of the need for another dump truck because of the extended area of construction work, as at Berault.

The following construction work was accomplished during January:

- A) Completion on Main Canal of 258 meters x 2  
Rough casting - Coating Volume:  $(258 \text{ m} \times 2) \times 1 \times 0.15 = 78 \text{ m}^3$   
Cement used: 215 bags
- B) Excavation 2nd part of Main Canal (Diversion on 250 m)  
1)  $125 \text{ m} \times 0.80 \times 2.10 = 210 \text{ m}^3$   
2)  $125 \text{ m} \times 0.60 \times 2.10 = 158 \text{ m}^3$   
 $\underline{\hspace{1.5cm}}$   
368 m<sup>3</sup>  
Excavation volume: 368 m<sup>3</sup>
- C) Bottoming 2nd part of Main Canal (Diversion on 150 m)  
Masonry volume:  $150 \times 2.10 \times 0.20 = 63 \text{ m}^3$   
Bottoming volume: 63 m<sup>3</sup>
- d) Masonry lining embankments  
Volume  $(115 \times 2) \times 1.10 \times 0.40 = 101 \text{ m}^3$   
Masonry volume on embankment 2 nd part of canal (diversion on  
Main Canal) 101 m<sup>3</sup>  
Cement used: 211 bags

- E) Length of excavation for Berault Canal:  $142 \times 1 \times 1 = 142 \text{ m}^3$   
 Volume  $142 \text{ m}^3$  - lateral: 5.9 D8
- F) Bottoming volume of lateral 5.9 D8 Berault:  $50 \text{ m} \times 1 \times 0.20 = 10 \text{ m}^3$   
 Volume  $10 \text{ m}^3$
- G) Cement used during January 1977: 426 bags
- H) Stockage of rocks: 75 truck loads of  $3 \text{ m}^3$  56  
 Volume  $267 \text{ m}^3$   
 Used for roads construction, bottoming of Main Canal and lateral 5.9 D8, raising of embankments on Main Canal - Diversion on 250 m
- I) Stock piled gravel washed and screened: 4 trucks loads of  $3 \text{ m}^3$  56  
 Volume  $14 \text{ m}^3$  24.
- J) Volume of gravel not washed: 35 trucks loads of  $3 \text{ m}^3$  56  
 Volume  $125 \text{ m}^3$   
 Utilised for roads rehabilitation
- K) Volume of fine sand - screened and washed: 20 trucks loads of  $3 \text{ m}^3$  56  
 Volume  $71 \text{ m}^3$  12
- L) Number of kilometers of old roads repaired: 245 meters
- M) Number of kilometers of new roads: 1600 meters.

Cayes 11 February 1977

(S) Ing. Hugues Bien-Aimé  
 In charge of Construction work

Progress continues steadily towards the establishment of the Dubreuil Irrigation District. Four additional groups have been formed, bringing the total to ten. Organizational activities will continue until all habitations and secondary canal systems are basically covered by a group capable of assuming responsibility for its construction, maintenance and repair.

As time is an important factor, it was decided by DARNDR personnel assigned to the project, that the most promising leader of each of the groups, formed to date, should start training early in February. To determine the most promising candidates, 4 recognised leaders from each group were invited to take an examination. The questions on the examination were developed by locally based DARNDR personnel consisting of the following: an agronomer, an agricultural specialist, an irrigation engineer, an extensionist, and a cooperative specialist. In administering the one hour limit examination, each question was thoroughly explained in Creole. Some of the participants completed the quiz in 15 minutes and others never finished. The highest score from each group was chosen to attend the February training seminar to be held at Aux Cayes. After the questionnaires were turned in, they were reviewed and correct answers given. This session created considerable enthusiasm.

Several planning meetings were held to develop the general and specific outline and details of the seminar. The detailed course plans are to be developed each week. A copy of the first week's agenda is included in this report.

DUBREUIL REHABILITATION PROJECT

RURAL MOTIVATION SECTION

EXAMINATION FOR RECRUITING ASSISTANT-EXTENSIONIST

SEMINAR OF FEBRUARY 7, 1977

Name - first name .....

Agricultural group of .....

- 1) Is Haiti an under-developed Country? yes or no.  
.....
- 2) Between Community Development and Cooperative which one should be first chosen to develop the rural community?  
.....
- 3) How does the Haitian peasant consider raising of live-stock, agriculture; as its bank - means of living - business. Underline the right answer.
- 4) Is it better to work alone or in group? Why?  
.....
- 5) What is a community group?  
.....
- 6) Is land irrigated from the Main Canal. yes or no.  
.....
- 7) Is water which has been used for washing suitable for land irrigation? yes or no. ....

- 8) The secondary canal or the farm canal: which one is best for land irrigation?  
 .....
- 9) How many meters one should leave from the embankment of a main canal. Why?  
 .....
- 10) Why one should not plant "Mazoumbelles" or use the picketing of animals on irrigation canals embankments?  
 .....  
 .....
- 11) Answer by true or false:
- a) 1 carreau of land is smaller than one hectare .....
  - b) Red beans are harvested after 5 months .....
  - c) The "Mazoumbelle" is harvested after 5 months .....
  - d) 6 pounds of beans weigh more than 6 pounds of rice .....
- 12) Tomato is a fruit or a vegetable? .....  
 Zinc phosphate is used to kill the carterpillar or rat? ....  
 .....
- 13) For the spraying of diseased plants one uses a .....
- 14) Cite two kinds of sweet potatoes cultivated in Cayes Plain.  
 .....  
 Cite two kinds of rice cultivated in Cayes Plain.  
 .....
- 15) At what time is it better to transplant: in the morning or at noon? .....

- 16) Where do you find the tick: .....  
Where do you find the flea: .....
- 17) What is the time to foal for the following animals?  
Cow ..... - Sow ..... - Goat .....  
Mare .....
- 18) Between the following animals underline the ruminants:  
horse - ox - sheep - goat - mule - chicken - donkey
- 19) The brooding time for hen is 2 months (true or false) .....
- 20) After how many days does the hatching of hen eggs take place.  
.....

DUBREUIL REHABILITATION PROJECT  
TRAINING SEMINAR FOR ASSISTANT-EXTENSIONIST  
WEEK OF FEBRUARY 7 to 14 FEBRUARY 1977

SCHEDULE:

<u>MONDAY 7 FEBRUARY</u>	8 h - 9 h	- Opening of the seminar by District Agronomist
	9 h - 10 h 15	- Soil Improvement, Agronome Charite Jean
	10 h 15 - 10 h 30	- Break
	10 h 30 - 11 h 45	- Explanation of the Rural Code F. Duvalier by Nerva Cassion
<u>TUESDAY 8 FEBRUARY</u>	8 h - 9 h 15	- Soil preparation by Agronome Max Mondésir
	9 h 15 - 10 h 30	- Soil improvement by Agr. Charite Jean
	10 h 30 - 10 h 45	- Break
	10 h 45 - 12 h	- Crop storage by F. Regis
<u>WEDNESDAY 9 FEBRUARY</u>	8 h - 9 h 15	- Soil conservation by Agr. Marc Simon
	9 h 15 - 10 h 30	- Rural motivation by Nerva Cassion
	10 h 30 - 10 h 45	- Break
	10 h 45 - 12 h	- Extension principles, F. Regis
	2 h - 4 h	- Visit of soil conservation sites (Agr. M. Simon)

THURSDAY 10 FEBRUARY

- 8 h - 9 h 15 - Seeds - ways of sowing by  
Agr. M. Mondésir
- 9 h 15 - 10 h 30 - Corn cultivation by Agr.  
Joseph St. Phard
- 10 h 30 - 10 h 45 - Break
- 10 h 45 - 12 h - Animal health by Franklin  
Mathieu

FRIDAY 11 FEBRUARY

- 8 h - 9 h 15 - Explanation of the Rural  
Code by Nerva Cassion
- 9 h 15 - 10 h 30 - Vegetable cultivation by  
Agr. Charite Jean
- 10 h 30 - 10 h 45 - Break
- 10 h 45 - 12 h - Nutrition principles by Miss  
Y. Dennery
- 2 h - 4 h - Visit to Levy Farm (Agr. St. Phard)

DUBREUIL REHABILITATION PROJECT  
TRAINING SEMINAR FOR ASSISTANT-EXTENSIONIST  
WEEK OF FEBRUARY 7 TO 14 FEBRUARY 1977

INSTRUCTORS LIST

Mr. Charite Jean		3 courses
Mr. Nerva Cassion		3 "
Mr. Max Mondesir		2 "
Mr. Fritz Regis		2 "
Mr. Marc Simon	1 visit	1 "
Mr. Joseph St. Phard	1 "	1 "
Mr. Francklin Mathieu		1 "
Miss Yolaine Dennerly		1 "
TOTAL	<u>2 VISITS</u>	<u>14 COURSES</u>

(S) Nerva L. Cassion  
In charge of Rural Motivation  
Section

Since the problem with any organization is that it must involve people with mutual interests, a wide variety of subjects have been included in the schedule of courses. This interest and the ability to work together, as well as an understanding of how to most efficiently take advantage of the benefits of their restored irrigation system are vital to the success of the Irrigation District once it is formed. Leaders involved in the seminar will be employed at a proposed salary of \$30.00 per month by the project to assist in further dissemination of the same information and ideas in their respective areas. Costs of the seminar and a \$2.00 per day subsistence per leader are borne by the project. Mr. Alex Tanis, DARNDR, has reviewed and agreed with these proposals.

In addition to the seminar, Extensionist Fritz Regis has proposed and coordinated with supervisory, engineering, agricultural, and advisory personnel project activities involving the groups in demonstration of improved practices. These demonstrations will take the form of small, jointly worked community farms. This approach should afford DARNDR personnel serving the Cayes area ample contacts with leaders and cooperators involved in the groups. New or existing DARNDR programs/projects/activities can be phased in or out through the normal access which these groups, which form the basis for the Dubreuil Irrigation District. The Dubreuil area and its Irrigation District can not always remain a special developing project area with specially assigned technicians and professionals so it must be adapted to survive and continue to progress with the normal assistance which DARNDR can provide some years hence. A copy of Mr. Regis proposal is included in this report.

DUBREUIL REHABILITATION PROJECT

Cayes 3 January 1977

To : The persons in charge of the Dubreuil Rehabilitation Project

From : Fritz Regis

Subject : Activity Program

In accordance with the Project actual orientation and certain operating imperatives:

- Choice of area for action
- Credits
- Restructuration of the group sections which will have to work together:

Agronomy - Agricultural group - Agricultural Engineering and Extension.

The proposed activities for the first semester of 1977 will be undertaken according to precise objectives:

- A)
- 1.- Consider with the agricultural groups the possibility of a better participation of the members to the activities and development of a demonstration farm.
  - 2.- Envisage now, at habitation level concrete actions with the cultivators in their farms.
  - 3.- Training of assistant-extensionists
  - 4.- Training of agriculturists:
    - a) Develop a demonstration farm.
    - b) Agricultural information over the radio.

B) Proposed actions on the farms.

This method of work in agricultural extension, which touches the farm, should help any farmer to have a better understanding and later to appreciate the different actions of development undertaken in his area.

Before such action, at the level , certain criterion should be observed as:

- The choice of cultivators
- The choice of farmers: location - land tenure - distribution - water availability - cultivation system - livestock raising - communication facilities - soil suitability - dominant crops.
- The number of farms by habitation should be determined by the above criterion and according to area leader's experience in the peasant community.

We should select two farms in less motivated area and a maximum of six farms in area with more understanding.

The ideal way should be to group 2 - 3 farms in one locality. Land of these habitations could be rearranged constituting afterward small groups of farms.

Immediately when studies of required conditions are made it is necessary:

At a 1st phase: To initiate the technicians, assistant-extensionist and the cultivators chosen for this operation to their future tasks.

At a 2nd phase: To engage simple actions on the agriculturist's farms which will bring immediate results without too much work and expenses.

At a 3rd phase: Depending of the first results obtained in the 2nd phase, and the response of the cultivators, long term actions should be taken with tact and carefulness, with minimum work and expenses.

At a last phase: According to the location of the farms and the desire of the agriculturists to be technically assisted since the beginning of the operation, we may approach the problem by habitation of cultivation of land which has been grouped with 10 or 11 agriculturists who get along well.

These groups of farms, where each agriculturist owns his property, should permit improved rentability and capital, also provide a better utilisation of capital derived from land.

We will judge according to the development of this last phase how to help these groups for credit, agricultural material, collective storage interesting each group or all the groups.

#### CONCLUSION:

It is understood that to accomplish the above program will require the cooperation of the section's leaders in charge of area and the assistant-extensionists for the success of this work which each will accomplish in his own area.

While the activities of Mr. Regis will afford DARNDR personnel more contacts with members of the groups formed, there are still many organizational matters and functions with which these groups need help. Mr. Cassion, who is responsible for the mechanics of assisting the people of Dubreuil to organize their irrigation district, is aware that he is spread far too thin to meet the requirement of contacting on a regular basis all of the 10 groups now formed. In addition, he lacks staff support to free him from detailed administrative and clerical work, necessary to support the activities. Unfortunately he is assigned to the Dubreuil Project for only 50% of his time. Additional assistance appears to be required at least until formation of the Irrigation District is complete.

Contacts were made with the Director General of Cooperatives (DARNDR) at Damiens concerning establishing the Irrigation District as a legal entity. The charter (statutes) of the Irrigation District must be developed and coordinated with the Agriculture and Irrigation Divisions of DARNDR before the Director General of Cooperatives can take preliminary action.

Mr. Alex Tanis, Coordinator - DARNDR - Région du Sud pointed out that if the irrigation district of Dubreuil were to wait for the legal processes involved in acquiring State owned land for their center of operations, much time and possibly investment may be lost. Clear title could not be assured. He recommend that the District of Irrigation purchase the required land for their center. However, the District cannot purchase land until it has been organized and has a full slate of officers since all funds owned by the District are deposited in BNRH under the account of the Dubreuil Irrigation District.

Mr. William Timmer, Business Manager, has not as yet fully recovered from his serious automobile accident, he has therefore been unable to prepare the financial reports for December and January. These reports will be combined and incorporated in the earliest possible Monthly Activity Report.