

## Region 5, February 14<sup>th</sup>

On February 14<sup>th</sup> the Engineering Team, together with Mr. Lionel Wordsworth of the Ministry of Agriculture and Mr. Dennis Tahal Regional Engineer Reggion 5 visited Region 5. The site visit was done both by car and boat.



*Guyana*



*Region 5*

## Mahaica River Mouth

Proposed projects:

1. Dredging of the Mahaica River Mouth (no. 3 on the list of dredging projects)

The Mahaica River Mouth is on the west side bordered by a seawall. On the east side mud and sand banks can be noticed.



*Seawall at the river mouth*



*Sand/mud banks at the river mouth*

## **Bellamy Sluice**

Proposed projects:

1. Rehabilitation of Bellamy Canal from Mahaicony to Mahaica (no. 45 of the list)

The mission team visited the Bellamy canal outfall sluice to the Mahaica River.

Existing width of the canal is approximately 60 feet. Existing depth of the canal varies between 8 and 12 feet.

Problems of drainage capacity were reported combined with the lack of an embankment between the drain and housing areas. The Ministry intend to extend the width of the canal with another 15 feet. The feasibility of these works could not be confirmed. Between the outfall sluice and the Mahaica river is a short (75 m) section of silted channel.



*Bellamy Canal*



*Bellamy Canal outfall Sluice*

## **Mahaica River**

The Mission team visited the Mahaica River stream up by boat. Some of the properties are still flooded.



*Flooded area along Mahaica River*

## **Baiboo Canal**

Currently between the Mahaica and Mahaicony Rivers there are no flood control embankments to prevent water from the upper reaches of these rivers overtopping their banks and combining with runoff from the land between from flowing from the south into the rice growing areas. The only embankment is alongside the Baiboo Canal, which was visited during the mission. This canal is approximately the southern boundary of the main rice growing area. The embankment alongside the canal is very low and therefore does not provide

significant flood control. In addition it is reported that cattle farmers cut the embankment to alleviate flooding on their lands to the south.



*Cattle in the swamp*

### **Main Canal**

The “Main Canal” heading from the north (Anjou & Hamlet) straight into the swamp normally transports water from the swamp area into the agricultural area. In January a dam closed this main canal preventing the coastal area from extra water out the swamp area.



*Dam, closing the main canal*

### **Bara Bara flood control embankment**

Proposed project:

1. Excavation of Bara Bara Canal from First Depth Mahaicony to Mahaica River and use materials removed from channels to construct a dam between channels (no. 40 of the list).

If security of the Baiboo Canal embankment could be assured then an option would be to raise that embankment to provide better flood protection. However, this cannot be assured and also provides no benefit to cattle farmers to the south. The solution suggested by NDIA is therefore a new flood embankment some kilometres further to the south, which would run between the Mahaica and Mahaicony Rivers at a place called Bara Bara. This would provide protection to both cattle grazing and rice lands. The NDIA Engineer for Region 5 has carried out investigations into the potential alignments of the flood control embankment. The

proposed alignment was visited by the mission team. The alignment was chosen to run along a reef of higher ground, which would minimise the height of the embankment, would provide suitable borrow material for embankment construction and would avoid as far as possible deep pegasse soils.



*Area where the Bara Bara Canal is planned  
Perpendicular on the existing Main Canal.*



*Pegasse soil, typical for this area*

### **River Mouth Mahaicony River**

Proposed projects:

1. Dredging of the Mahaicony River Mouth (no. 2 on the list of dredging projects)

The Mahaicony River enters the Atlantic along a northwesterly alignment with similar sand spit to the Mahaica evident running east to west. There is no known bathymetric survey of the Mahaicony River mouth. No record of previous dredging has been found.



*Muddy shallow water along the coast  
Close to the Mahaicony river mouth*



*Mahaicony River Mouth*