

The Republic of the Sudan
Ministry of Tourism and National Heritage
National Corporation for Antiquities and Museums
(NCAM)

Merowe Dam Archaeological Salvage Project (MDASP)

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Introduction

The idea of building a dam at the 4th Cataract of the Nile dates to the period of the Anglo-Egyptian administration in the Sudan (1943). It was previously referred to as 'the Hamdab Dam' and recently re-named 'the Merowe Dam' after a small island, the northern part of which is going to be cut through by the structure of the dam itself (Back cover, top). Most of the local inhabitants pronounce the name of this island as 'Mirowy'.

For various reasons, this project was not realized over the last 50 years. Since it came to power in 1989, the present government has considered this dam as a project of foremost priority as it will create enough hydroelectric power (1250mg/w) to develop many sectors of the national economy.

Location, time and impact

After many studies made by expert international institutions and companies, the Government of Sudan decided to build a single dam across the island of Mirowy, located about 26km upstream from the pyramids of Nuri. The completion of the project is scheduled for August 2007.

The highest water level (reached during flood season) will be approximately 300m above sea level. This will result in the inundation of a strip of land, approximately 170km in length, upstream of the dam (Back cover, bottom). A lake about 4km wide will be formed immediately behind the dam. This will result in the dislocation of more than 48,000 people from their homes.

MDASP

The aim of this project is to rescue archaeological sites endangered by the construction of Merowe Dam. The realisation of this dam will affect a considerable number of archaeological sites to varying degrees:

i) Sites which are going to be either destroyed by the engineering activities at the dam site or covered by the waters of the lake upstream. This will include a strip of land of about 170km on both banks of the Nile together with dozens of islands.

ii) Sites which are going to be destroyed by the building of houses and digging of irrigation canals in the resettlement areas.

iii) Sites which are going to be affected by the construction of the power transmission lines.

iv) Although the monumental sites of the Napata Region will not be directly affected by these activities, NCAM is concerned with the expected environmental changes. These sites include the famous Pharaonic and Napato-Meroitic towns and cemeteries at Jebel Barkal, Nuri, Sanam, el-Kurru, Hillat el-Arab, the Post-Meroitic tumuli of ez-Zuma, the Christian monastery of Ghazali and the later strongholds at Merowe East, Kagabi, ed-Datti and possibly other sites located further downstream.

General results of recent work

Many campaigns to the region have been organized during the last 13 years. These are principally:

- * Campaigns by NCAM on both banks of the Nile and on some islands. One of these campaigns was directed by a UNESCO expert (Prof. Jean Leclant).

- * The University of Rome in the downstream portions of the region.

- * An assessment of the impact of the dam on archaeological sites made by Dr. K. Grzymiski for Monenco, the Canadian Company responsible for the feasibility study of the project.

- * The Sudan Archaeological Research Society (SARS) conducted surveys and test excavations on the left bank of the Nile and on the islands (Dar el-Arab to Kerbikan).

- * The Mission of the Archaeological Museum of Gdańsk (Poland) surveyed the right bank and conducted test and rescue excavations.

These activities have thrown much light on the archaeological potential of the region and resulted in the recording of hundreds of sites. The sites consist of cemeteries and isolated tombs, rock drawings of various periods, remains of settlements, mainly of later periods (Christian) and monumental fortresses of the Medieval period. The various surveys have revealed a high density of Post-Meroitic and Christian remains. However, the discovery of vast sites of the Kerma period on the right bank indicates that future investigations may be very fruitful in finding considerable remains of all periods of the country's history.

The present situation

Preliminary preparation for the construction of the Dam has already started:

- * The first resettlement area (el-Multaga) is located about 40km south of ed-Debba (Figure 1). The resettlement programme here consists of the construction of two villages and a complex of administrative premises to run a vast agricultural scheme (Colour plate VI). This area is reserved for the resettlement of about 8% of the dislocated population, the inhabitants of the villages which are going to be directly affected by the engineering activities at the dam site. A great number of people have already moved to their new homes.

- * A campaign (2001-2002) was organized by NCAM in collaboration with the French Archaeological Section (SFDAS) to rescue the antiquities of the el-Multaga area (13,000 feddans: about 30,940 hectares). The operation resulted in the recording of over 100 concentrations of prehistoric sites together with a Christian settlement near the Nile in a location which had been chosen by the Ministry of Irrigation for the installation of the new pumping station for the resettlement project.

- * Further upstream, roads on both banks of the Nile leading to the dam site from Kareima and Merowe, together with a railway linking the dam site with the existing line on the right bank, have been built. A small township for the engineers and, later, for the administration of the dam and the power station is completed (Colour plate VII). The engineering work for the dam itself is planned to begin in October 2003.

- * The National Corporation for Antiquities and Museums (NCAM) organised a six month campaign (2001-2002) to rescue sites endangered by the engineering activities on the left bank, over a distance of about 8km. The result of this campaign was the recording and testing of dozens of sites, prehistoric settlements, graves of the pre-Napatan, Post-Meroitic (Plate 1, Colour plate VIII) and Christian periods and others of undetermined date. Many rock-drawings of various periods were also recorded. These are mainly drawings of animals (camels, donkeys and horses), boats and crosses (Plate 2). The campaign also included the excavation of a big *kom* on the Island of Mirowy containing 10 Christian graves on the surface (Colour plate IX) and an earlier Post-Meroitic burial at a lower level, in addition to houses of the Christian period. The surface of this island yielded rare Prehistoric tools.

- * The Mission of the Archaeological Museum of Gdańsk (Poland) covered the equivalent area on the right bank (see Paner, this volume). Sites of all periods have been recorded and tested. The main achievement of this mission is the discovery for the first time of numerous Kerma sites in this region.

Hence, the previously known geographical boundaries of this culture have been extended more than 200km further upstream.

* On the left bank and on the islands in the area between Dar el-Arab and Kibekan, the Sudan Archaeological Research Society (SARS) has conducted extensive surveys and excavations covering sites representing all phases of the country's history (see Welsby, this volume). The discovery of the remains of a Kushite pyramid in this concession is a real surprise.

Future work

During the coming five years, intensive archaeological work is needed in the reservoir area upstream from the dam site, along the power transmission lines, in the new resettlement areas and on the sites of the Napatan Region (Figure 1):

a) The lake sites

As already noted, the Merowe Dam (65m high) will affect the villages over a distance of about 170km. The new lake will have a maximum width of about 4km including the actual channel.

Left bank

NCAM will continue its investigations from the dam site to Dar el-Arab. The Sudan Archaeological Research Society (SARS) will keep its concession in the region between Dar el-Arab and Kerbikan (40km).

Right bank

The Mission of the Archaeological Museum of Gdańsk (Poland) will continue its rescue programme between the dam site and Khor Dakhfeli.

Archaeological Missions are invited to contribute to the rescue of sites upstream from the above-mentioned concessions.¹

b) The power transmission lines

Five lines are going to be installed:

- 1) Dam site – Omdurman
- 2) Dam site – Atbara
- 3) Dam site – Dongola
- 4) Atbara - Khartoum North (through the Butana)
- 5) Atbara - Port Sudan.

NCAM has agreed with the Dam Administration to undertake the survey of these lines as soon as they are demarcated on the ground (2003). Using this method the contractors can avoid the destruction of ancient remains and less rescue excavation will be required. This has already been experienced in recent 'road' and 'pipe-line' archaeological projects.

c) The resettlement programme

In addition to el-Multaga, three other resettlement areas will be prepared for the dislocated population of the region:

1) The lower reaches of Wadi Muqaddam will be prepared for the resettlement of the people from the region of Amri. The project, which will cover an area of 35,000 feddans (about 83,300 hectares), is scheduled for 2003.

2) Wadi el-Mukabrab (24km south of Atbara) will accommodate some of the Manasir people. The project covers an area of 42,000 feddans (about 99,960 hectares). The realisation of this project is planned for the year 2004.

3) Some of the Manasir will be resettled on the banks of the new lake, probably in the region of el-Kab - Station No. 10 (about 40km downstream from Abu Hamed). This project has not yet been precisely defined.

d) The Napata Region

Although the sites of the Napata Region are not going to be affected directly by the construction of the dam, expert advice concerning the expected environmental changes (i.e., the water table) is required. NCAM submitted a nomination file for the inclusion of Jebel Barkal, el-Kurru, ez-Zuma, Nuri and Sanam on the World Heritage List. A UNESCO expert visited these sites (September 2002) to evaluate their state of preservation and the integrity of their landscape. Fortunately, the nomination of the aforementioned sites was accepted by the World Heritage Center on July 3, 2003.

El-Multaga Museum

NCAM and the Merowe Dam Implementation Unit are planning to create a museum at the first resettlement area (el-Multaga) for the preservation and exhibition of the archaeological and ethnographical wealth of the 4th Cataract.

Publications

All missions are free to choose the language and style for their publications. However, NCAM would like to have a collective volume containing the general results of the work of all missions participating in the rescue project. This should be presented in English (with an Arabic translation) immediately after the end of the campaign in 2008. The final reports should be published, at the latest, five years after the end of field activities.