

Dikkowita fishery harbour, Sri Lanka

Direct access to the sea and high standard facilities: the Dikkowita fishery harbour replaces inadequate berthing facilities at various locations in the Negombo lagoon. Local fishermen no longer need to negotiate the Hamilton canal to get to open water. The new harbour is strategically located for trade and export, some ten kilometres north of Sri Lanka's capital Colombo and close to the airport and the new central fish market.

The project is financed by a soft loan arranged by the government of Sri Lanka, which is provided by HSBC Bank, the Dutch government's ORET fund and the government of Sri Lanka. Further support in the form of organisational and management expertise came from the PUM Netherlands Senior Experts organisation. They provided capacity development services to Ceylon Fishery Harbours Corporation, the operators of this fishery harbour.



Location

Dikkowita, Sri Lanka

Client

Ministry of Fisheries and Aquatic Resources Development, Sri Lanka

Contractor

BAM International bv

Contract period

March 2009 – June 2011

Contract sum

€44 million

'Design and construct of South East Asia's largest fishery harbour.'

Scope of work

The harbour is one kilometre long and its basin is formed by two breakwaters at the seaside, quay walls at the landside and eight jetties in the basins. The northern basin has a depth of 3 metres and the southern basin has a depth of -3 metres to -3.5 metres.

Quay walls, jetties and other structures can cater for boats up to a length of about 40 metres. Designed to handle a daily catch throughput of 125 tonnes of fish per day, the harbour now includes an administration building, offloading building with cold rooms, auction building, a net repair building, a general store with fire fighting equipment, crew amenities, a canteen, fuel and water facilities, as well as a ship repair area with a dock for a mobile boat hoist.

In addition BAM International has dredged the basin to the various levels given and has realised a wastewater treatment plant. The construction of a bridge over the Hamilton Canal to connect the harbour to the main roads, also belonged to the scope. BAM furthermore took care of all infrastructure, such as roads, drains and MEP installation.



Construction of the main office harbour building

Financing

The project is financed by a soft loan provided by HSBC Bank, the Dutch government's ORET fund and the government of Sri Lanka. BAM International has been actively involved in the negotiations surrounding the financing process. The operators of the fishery harbour, Ceylon Fishery Harbours Corporation, were able to temporarily increase their organisational and management manpower with support from the PUM Netherlands Senior Exports organisation.



Finished breakwater head

Design and construct

Marine designs were provided from the Netherlands by sister company DMC/BAM Infraconsult, while onshore designs were in the hands of local designers Design Consortium Limited. Both were managed by BAM International. In addition to marine design other BAM companies made their contribution to various other aspects of the project. Quarrying experience was provided by BAM Ritchies UK, while Xbloc moulds and lifting equipment were delivered by BAM Project Support from the Netherlands. Dikkowita also marks the collaboration with our Belgian sister company BAM Balteau, who provided the expertise to design a wastewater treatment plan.



Over 6,000 Xblocs were used for the breakwaters

Xblocs

Over 6,000 Xblocs were used to construct the breakwaters for the Dikkowita fishery harbour. Designed by DMC/BAM Infraconsult, their unique shape provides a very stable interlocking structure, while their production requires less concrete than that of traditional elements. A special concrete mix makes it possible to produce two Xblocs per day with a single mould. The Xblocs are carefully put in to place with crawler cranes and a 75-tonnes excavator guided by an ultra-precise differential global positioning system.