# MINIMISING DISTURBANCE TO WILDLIFE IN ANAMALAI TIGER RESERVE DUE TO CONTOUR CANAL REPAIR AND CREATION OF WILDLIFE CROSSINGS

Main facts and requested action by Standing Committee NBWL

#### Facts:

Major renovation work of the 49.3 km long Contour Canal is underway in Anamalai Tiger Reserve.

- The State Govt. has sanctioned Rs 185 crore for repair works and the Chief Minister inaugurated the repair works during February 2010.
- The State PWD has commenced repair works on 1 March 2011. It is reported that the work will be taken up for 6 months in a year and is set to be completed in 3 years time.
- On road parallel to the canal there is movement of vehicles and materials, including heavy machinery.

#### Primary concern:

Where the steep-sided canal passes through ATR, many animals get drowned/washed away and wildlife crossing is hindered due to unsuitable design and very few structures to allow animal crossings.

#### Details of the canal:

As part of Parambikulam – Aliyar project, conceived during 1962 to cater the irrigation needs of farmers in Coimbatore district, the 49.3 km long contour canal was commissioned in 1965. This canal has cut through some of the finest wildlife habitats along the northern boundary of the present Anamalai Tiger Reserve (ATR) and continuous to be a threat as wildlife often gets washed away in the canal due to its steep sides.

- The canal begins near Sarkarpathy powerhouse, in the Pollachi range of ATR and ends at Thirumurthy reservoir located in the fringes of the Udumalpet range of ATR.
- Near Thirumurthy reservoir, the canal extends outside the Tiger Reserve for about 8 km. The rest of the length of the canal is within the Tiger Reserve.
- The canal is steep and the forest is precipitous near the bank where animals are vulnerable to fall into the canal and cannot swim back safely due to its slippery cement banks. The banks are un-scalable.

#### Main pros and cons:

Benefits: The canal provides for irrigation in adjoining district and acts as a mechanism to deliver a crucial ecosystem service (water) of the Anamalai Tiger Reserve to the people.

Conservation threats: Several of large mammals and countless smaller species are reported to have washed away in this canal since its commissioning. Most mammals including animals such as civets, loris, and pangolins, and deer are unable to cross the canal due to its structure and location and the canal has a fragmenting effect on their populations.

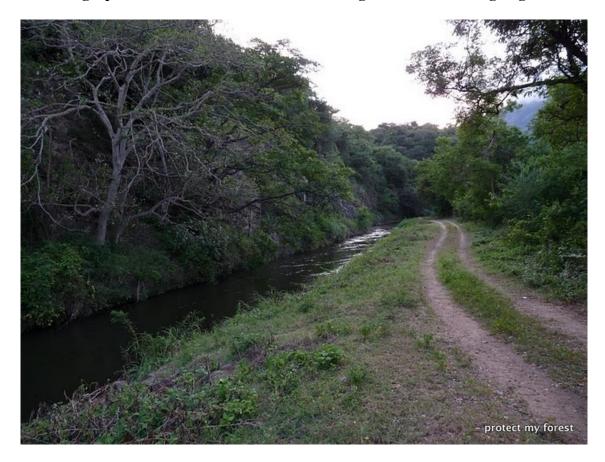
- Dr. R. Sukumar made a mention of this canal and reported even a tiger getting washed away in this canal (*Ref: Elephant days and nights, 1991*). Incidents of elephants getting washed away are known.
- Wildlife scientists working in the region have pointed out the need for mitigation in the past and important locations for animal safety and crossing. Forest Department authorities are aware of the need to make the canal wildlife-friendly. There are no structures such as steps to facilitate animals to drink from the canal when water gets scarce during hot months.

#### Request to Standing Committee National Board for Wildlife (SC-NBWL):

Commission site assessment by Member SC-NBWL along with ATR and PWD officers to review and identify:

- (a) permissions and conditions for undertaking such repair work,
- (b) design considerations and wildlife crossing structures where canal runs within ATR,
- (c) initiate an awareness campaign on watershed and ecosystem service benefits of ATR and on minimising negative effects of canal on forests and wildlife in ATR.

Photographs of Contour Canal in Anamalai Tiger Reserve and ongoing work





## Movements of heavy machinery along Contour Canal in Anamalai Tiger Reserve





## Photograph showing steep sides of Contour Canal that poses hazards to wildlife



#### **NEWS ITEM**

From *The Hindu* dated 13 May 2011 http://www.hindu.com/2011/05/13/stories/2011051353240500.htm

### PAP contour canal renovation work in progress

Special Correspondent



Fast pace: Work under way for renovating the 49.3 km long contour canal from Sircarpathy to Thirumurthy dam of the Parambikulam - Aliyar Project.

POLLACHI: Works for the renovation of the 49.3 km long contour canal from Sircarpathy to Thirumurthy dam is progressing at a fast pace in three phases. Currently, work is being carried out at Sircarpathy, Navamalai and Nallaru.

The renovation was sanctioned in the budget with an allocation of nearly Rs 185 crore. The canal is considered an engineering marvel and has nine tunnels for a length of nearly 30 km with one of them being five km long. The works began on March 1. The work tender was awarded in three phases and will be completed in three working seasons with a sixmonth time gap in between during the South-West and North-East monsoons for flow of water to the reservoirs to wet the ayacut irrigation lands.

The work is being executed under the supervision of Chief Engineer P. Sivasankaran, Superintending Engineer S. Ranganathan, Sub-Divisional Engineer M. Kulandaisamy, Assistant Executive Engineer Sivalingam and Assistant Engineer S. Subramanian.

PAP Thirumurthy Farmers Project Committee chairman 'Medical' K. Paramasivam, talking to reporters at the work site, said that the canal had, since 1965, undergone only repairs whenever there was a damage or breach. Owing to the vagaries of nature, including rolling down of boulders from the hills and roots of trees damaging the concrete surface, the canal was damaged to a great extent.

As against the expected realisation of 18 to 23 tmcft of water at Thirumurthy depending on the rainfall, there was considerable loss of water owing to seepage and percolation. For example, of the 1,100 cusecs released from Sircarpathy, only around 700 cusecs reached Thirumurthy, thus accounting for a loss of 400 cusecs. The scheme was intended to provide water for irrigating over 3.77 lakh acres spread over four zones.

After 45 years, a complete and comprehensive renovation of the canal has commenced now after the expert committee on completion of inspection confirmed to the Government the need for renovating the canal.

Mr. Paramasivam said that authorities have planned to renovate and stop work when the South West monsoon sets in to enable the water reach the agricultural lands. The work will resume after the exit of North East monsoon and will go on till May end. To enable the halting of work to allow flow of water, the authorities are demolishing the existing canal structure for a length of 500 m i.e. only to the extent where they can take up and complete the renovation works before the monsoon sets in.

As a priority, very badly damaged stretches are being taken up now where wastage of water is found to be high, official sources said.