

**GOVERNMENT OF INDIA
RAILWAYS
LOK SABHA**

UNSTARRED QUESTION NO:3033
ANSWERED ON:06.12.2007
PLANTATION OF 'VETIVER GRASS' BY KRC
Khaire Shri Chandrakant Bhaurao

Will the Minister of RAILWAYS be pleased to state:

- (a) whether Konkan Railway Corporation (KRC) has planted 'Vetiver Grass' on the tracks so that their roots can bind together the loose earth and prevent soil erosion;
- (b) if so, the details thereof and the reasons for choosing the Vetiver Grass;
- (c) the extent to which the system will prove to be effective in preventing the landslides;
- (d) the total length will be covered by the Vetiver Grass;
- (e) the total expenditure likely to be incurred on the work and the time by when the entire work will be completed;
- (f) the number of landslides took place during the last three years and the damages caused to the Western Railway properties; and
- (g) the other steps Railways propose to take to prevent landslides?

Answer

MINISTER OF STATE IN THE MINISTRY OF RAILWAYS (SHRI R. VELU)

(a) to (g): A Statement is attached.

STATEMENT REFERRED TO IN REPLY TO PARTS (a) TO (g) OF UNSTARRED QUESTION NO.3033 BY SHRI CHANDRAKANT KHAIRE TO BE ANSWERED IN LOK SABHA ON 06.12.2007 REGARDING PLANTATION OF 'VETIVER GRASS' BY KRC.

(a): Yes, Sir.

(b): As per the Research, Design and Standard Organization (RDSO) guidelines issued in February 2005 on erosion control, Corporation has choosen vetiver grass plantation on Konkan Railway route at some locations to control soil erosion in soil cuttings.

(c): As per RDSO recommendations, this plantation is meant mainly for preventing soil erosion by checking percolation of water in soil cuttings and ultimately preventing slopes failure and land slides.

(d): Approximately 100 Km track length will be covered by Vetiver Plantation. So far, approximately 60 Km track length has been covered.

(e): The Corporation has spent approximately Rs.1.30 crores towards Vetiver Plantation during the year. The proposed future expenditure towards Vetiver Plantation will be approximately Rs. 1.0 crore. Hence the total likely expenditure to be incurred on Vetiver Plantation will be about Rs.2.30 crore. The entire work is proposed to be completed by 2009-10.

(f): No landslides took place and no damages were caused due to them, to Western Railways' properties during the last three years. However, on Konkan Railway route landslides took place and damages caused to the Corporation are as under:

Year Number of Landslides Cost of Damages
(Rs. in crore) (approx.)

2005	4 nos.	10.00
2006	3 nos.	7.00
2007	2 nos.	7.00

Total 9 nos. 24.00

(g): Various geo-tech safety works like flattening of cutting slopes, rock-bolting and shotcreting of cuttings, micro piling, soil nailing of cuttings, construction of toe walls and lining of catch water drains are the other steps Corporation has taken to prevent landslides.