

**GOVERNMENT OF INDIA
RAILWAYS
LOK SABHA**

UNSTARRED QUESTION NO:104

ANSWERED ON:05.12.2013

CONSUMPTION OF DIESEL

Bauri Smt. Susmita;Chaudhary Shri Arvind Kumar;Putul Kumari Smt. ;Sivasami Shri C.

Will the Minister of RAILWAYS be pleased to state:

- (a) the total quantity of diesel being consumed annually by the Railways in running of trains in the country during the last three years and the current year;
- (b) whether a huge quantity of diesel amounting to crores of rupees being wasted every year due to mismanagement by the Railways;
- (c) if so, the details thereof along with the remedial measures taken/being taken by the Railways to prevent such loss;
- (d) whether the Railways propose to install fuel saving device in the trains running with diesel engine and if so, the details thereof along with the estimated saving of fuel as a result thereof;
- (e) the total number of tracks/routes in the country on which only diesel engines are in operation;
- (f) whether the trains on the said routes are proposed to be run on electricity and if so, the details thereof; and
- (g) whether the electrification projects announced during the last three years and the current year being implemented and if so, the details thereof?

Answer

MINISTER OF STATE IN THE MINISTRY OF RAILWAYS (SHRI ADHIR RANJAN CHOWDHURY)

(a) to (g): A Statement is laid on the Table of the House.

STATEMENT REFERRED TO IN REPLY TO PARTS (a) TO (g) OF UNSTARRED QUESTION NO. 104 BY SHRIMATI SUSMITA BAURI, SHRI SIVASAMI C., SHRI ARVIND KUMAR CHAUDHARY & SHRIMATI PUTUL KUMARI TO BE ANSWERED IN LOK SABHA ON 05.12.2013 REGARDING CONSUMPTION OF DIESEL.

(a) Quantity of diesel consumed:

Year	Diesel Oil (in Kilolitres) specific fuel consumption (SFC)		
	Consumed by (litres/ 1000 GTKM)		
	locomotives	Goods	Pass
2009-10	2,400,467	2.22	4.03
2010-11	2,516,044	2.19	3.85
2011-12	2,705,084	2.21	3.85
2012-13#	2,699,616	2.19	3.84

figures for 2012-13 are provisional.

(b) No, Madam,

(c) Does not arise.

(d) Indian Railways have taken various initiatives and there has been an improvement of 41% in the specific fuel consumption (SFC) of Goods locomotives and 22% in passenger services from 1970 to 2011.

The devices/ mechanism for fuel saving which are being considered are as below:

I. Intelligent low idle (ILI): Under this system the engine RPM is reduced when locomotive is expected to remain idle for long time.

II. Auxiliary power unit (APU): This device shall shut down the engine when locomotive is expected to remain idle for long time and only a small engine using much less fuel will operate to keep the safety related assemblies working.

III. Automatic engine start & stop (AESS): This device will shut down the engine when locomotive is expected to stand idle for long time & switch it ON again whenever required for working due to safety related parameters. Savings would be in proportion to shutting down of loco. The product is still under development.

IV. Guidance for Optimized locomotive Driving (GOLD): this device will help locomotive pilots to adopt better driving techniques by providing real time inputs of the terrain, thereby help in saving fuel.

V. Electronic Fuel Injection (EFI): Electronic Fuel Injection (EFI) System is programmed to inject fuel into the cylinder at most optimum time so as to reduce fuel consumption and emissions from the engine.

The installation of the above fuel saving devices/ mechanism are expected to provide more than 10% fuel saving. However this is subject to varying operating conditions.

(e) As on 31.3.2012 diesel engines operated on 44325 route kilometres (RKM) i.e. 63969 track kilometres.

AS on 31.03.2012			
	Electrified	Non-Electrified	Total
Route KMs	20275	44325	64600
Running Track Kms	38669	51132	89801
Total Track Kms	51093	63969	115062

(f) The routes exclusively on diesel traction are getting electrified in stages with priority getting decided based on operational and financial considerations. While 1810 Route Kilometres were electrified in X five year plan, the progress was enhanced to 4556 Route Kilometres in XI plan. In XII plan, the target has been further enhanced to 6500 Route kilometers.

(g) The electrification projects (Plan Head 35) included in Railway Budget in the last 3 years are being implemented with their status being as follows:

SN	Name of the project	Year of inclusion	Present Status.
	RKM : Route Kilometers		
	in pink		
	book		
1	Shoranur-Mangalore- Penambur (328 RKM)	2010-11	155.5 Km wiring done
2	Rohtak-Bhatinda- Lehramohabat (252RKM)	2010-11	Detailed estimate sanctioned
3	Ghaziabad-Moradabad (140 RKM)	2010-11	28 Km wiring done
4	Gondia-Balharshah (250 RKM)	2010-11	32 Km wiring done
5	Daund-Manmad inclu. Punthamba-Shirdi (255 RKM)	2010-11	255 Km wiring done
6	Pandabeshwar-Sainthia-Pakur inclu. Khana Santhia (205 RKM)	2010-11	205 Km wiring done
7	Mathura-Alwar (121 RKM)	2010-11	96.3 Km wiring done
8	Yelahanka-Dharmavaram-Gooty section incl. Penukonda- Dharmavaram via Sri Satya Sai Prashanthi Nilayam. (306 RKM)	2010-11	185 Km wiring done
9	Vizianagaram-Rayagada-Raipur (465 RKM)	2011-12	4 Km wiring done
10	Rosa-Sitapur-Burhwal (181RKM)	2011-12	Contract awarded
11	Alwar-Rewari (82 RKM)	2011-12	47 Km wiring done
12	Andal-Sitarampur via Jamuria -Ikra and Sripur(57 RKM)	2012-13	Detailed estimate sanctioned
13	Coimbatore North- Mettupalayam (33 RKM)	2012-13	Contract awarded
14	Jharsuguda-Sambalpur -Titlagarh section including Jharsuguda- Ib (Bye-pass)line (238 RKM)	2012-13	Detailed estimate sanctioned
15	Kumedpur-Malda-Singhabad and Pakur-Malda (153 RKM)	2012-13	Detailed estimate sanctioned for Kumedpur-Malda-Singhabad
16	Guntakal-Bellary-Hospet section including Tornagallu -Ranjitpura branch line (138 RKM)	2012-13	Detailed estimate sanctioned
17	Itarsi-Katni-Manikpur-Chheoki including Satna-Rewa (653 RKM)	2012-13	Detailed estimate sanctioned and contract awarded for Manikpur-Chheoki
18	Sambalpur-Angul (156 RKM)	2012-13	Detailed estimate sanctioned
19	Manheru-Hisar (74 RKM)	2012-13	Detailed estimate sanctioned
20	Garwa Road-Chopan-Singrauli including Karaila Road (257 RKM)	2012-13	Contract awarded
21	Nallapadu-Guntakal including Gooty-Pendekallu (426 RKM)	2012-13	Detailed estimate sanctioned
22	Amla-Chhindwara-Kalumna (257 RKM)	2012-13	Detailed estimate sanctioned. Contract awarded for Amla-Chhindwara
23	Delhi Sarai Rohilla-Rewari	2013-14	New work. Detailed estimate

- Phulera-Palanpur Ahmedabad under preparation including Kalo;-Gandhinagar
- Khodiyar and Alwar-Bandikui
- Jaipur-Phulera (1087 RKM)
- 24 Jakhhal-Hisar (79 RKM) 2013-14 New work. Detailed estimate under preparation
- 25 Jakhhal-Dhuri-Ludhiana (123 RKM) 2013-14 New work. Detailed estimate under preparation
- 26 Rajpura-Dhuri-Lehra Muhabhat 2013-14 New work. Detailed estimate (151 RKM) under preparation
- 27 Damanjodi-Singapur Road 2013-14 New work. Detailed estimate (152 RKM) under preparation