

GOVERNMENT OF INDIA
MINISTRY OF WATER RESOURCES,
RIVER DEVELOPMENT & GANGA REJUVENATION
LOK SABHA
STARRED QUESTION NO. †*62
ANSWERED ON 21.07.2016

FLOOD MANAGEMENT PROJECTS

*62. SHRI SUSHIL KUMAR SINGH

Will the Minister of WATER RESOURCES, RIVER DEVELOPMENT AND GANGA REJUVENATION be pleased to state:

- (a) the details of flood management projects completed during the current Five Year Plan period and the benefit accrued as a result thereof;
- (b) the details of the ongoing, pending and proposed flood mitigation projects in the country, State/UT-wise;
- (c) the financial and physical targets and the achievements thereof under such projects, State/UT-wise;
- (d) whether any specific measures have been taken by the Government to check excessive rain water and flood in the country, especially in the current monsoon season particularly for Bihar; and
- (e) if so, the details thereof, State/ UT-wise?

ANSWER

THE MINISTER OF WATER RESOURCES, RIVER DEVELOPMENT AND GANGA REJUVENATION
(SUSHRI UMA BHARTI)

(a) to (e) : A statement is laid on the Table of the House.

STATEMENT REFERRED TO IN REPLY TO PARTS (a) TO (e) OF STARRED QUESTION No. 62 (Priority No. 2) FOR ANSWER ON 21.07.2016 REGARDING “FLOOD MANAGEMENT PROJECTS”

(a) to (c) Under the Flood Management Programme (FMP) in a total of 519 projects have been approved during the XI and XII Plan, out of which 297 projects have been completed till date. The completed projects have provided reasonable protection against floods in 19.59 lakh hectare area and benefited 197.23 lakh people in the country.

The State-wise details of projects approved, projects completed and area protected under Flood Management Programme (FMP) so far are given at **Annex-1 & 2** respectively.

The Ministry also provides technical guidance to State Governments through the expert agencies-- Central Water Commission (CWC) and Ganga Flood Control Commission (GFCC) in formulation of flood management projects. During the XII Plan, a total of 537 projects were received for techno-economic appraisal out of which 256 projects were cleared by the appraisal agencies. The State-wise details are given at **Annex-3**.

Out of the techno-economically cleared 256 projects, 99 projects for Rs. 5344.15crore have been approved under Flood Management Programme (FMP). A total central assistance of Rs.4723.08 crore has been released to various States till date, which includes Rs. 907.82 crores for Bihar.

(d) & (e) The subject of flood management being under the purview of the States, the schemes for flood control are formulated and implemented by concerned States as per their priority. The Union Government supplements the efforts of the States by providing technical guidance and also promotional financial assistance for management of floods in critical areas. In addition, during XII Plan, the Ministry has approved a plan scheme for Rs.281 crore for flood forecasting, modernisation and expansion of the flood forecasting network for automatic data collection, expeditious transmission and flood forecast dissemination. The scheme has the following components;

- i) The Flood Forecasting network is proposed to be expanded from existing 183 flood forecasting stations to 275 stations as per details in **Annexure 4**. Simultaneously, the support network of 708 hydrological observation sites would be increased to 1118. The entire network of 1118 stations would be on an automatic satellite based telemetry system. Currently only 507 stations are having telemetry facility.As a result of the telemetry network, live information would be available on the real time basis. It will eliminate the delays in dissemination of flood warnings to the States due to the manual system of dissemination.

- ii) All the 12 regional offices of CWC will have the facility of carrying out data modeling for making timely forecasts to forewarn the community and the local authorities with lead time upto 72 hours before occurrence of the event. This is in contrast with the existing forecast lead time of 24 hours.
- iii) The enhanced network will ensure coverage of the hitherto uncovered additional regions in sub-basins of Ganga, Brahmaputra, Mahanadi & Godavari, which are amongst highly flood prone areas and experience huge flood damages.
- iv) It is also proposed to provide inundation forecast on pilot basis in 3 mha flood prone area of Kosi, Brahmaputra, Godavari and Sabri sub-basins using high resolution Digital Elevation Models already available with National Remote Sensing Centre.
- v) Currently, on an average 6000 flood warnings are issued annually with an accuracy of over 98%. It is expected that with expanded network of flood forecast systems, these would go upto 10,000 annual warnings covering hitherto uncovered areas in the basins mentioned above, with an enhanced lead time of upto 72 hours. This would give community enough time to ensure preventive action to save life and property.

In addition, the Government of India is having continuous dialogue with Government of Nepal for construction of storage projects in Nepal for mitigation of floods in India especially Bihar.

Annexure referred to in reply to parts (a) to (c) of Lok Sabha starred question no.62 (priority no-2) for answer on 21.07.2016 regarding "FLOOD MANAGEMENT PROJECTS"

State-Wise Works Approved, Works Completed and Funds Released under Flood Management Programme (FMP) during XI and XII Plan till date.

Rs. in crore

Sl. No.	State	XI Plan			XII Plan			Total (XI + XII Plan) Status			
		Works Approved		Funds Released (XI Plan)	Works Approved		Funds Released (XII Plan)	Works Approved		Number of Works Completed (upto 12.3.2015)	Total Funds Released (XI + XII Plan)
		Nos.	Estimated Cost		Nos.	Estimated Cost		Nos.	Estimated Cost		
1	Arunachal Pradesh	21	224.69	81.69	0	0.00	64.22	21	224.69	11	145.91
2	Assam	100	996.14	748.86	41	1386.97	64.89	141	2383.11	94	813.75
3	Bihar	43	1370.42	723.18	4	447.63	184.64	47	1818.05	41	907.82
4	Chhattisgarh	3	31.13	15.57	0	0.00	3.75	3	31.13	0	19.32
5	Goa	2	22.73	9.98	0	0.00	2.00	2	22.73	2	11.98
6	Gujarat	2	19.79	2.00	0	0.00	0.00	2	19.79	1	2.00
7	Haryana	1	173.75	46.91	0	0.00	0.00	1	173.75	0	46.91
8	Himachal Pradesh	3	225.32	165.98	4	1139.62	171.87	7	1364.94	1	337.85
9	Jammu & Kashmir	28	408.22	252.57	15	562.47	129.39	43	970.69	8	381.96
10	Jharkhand	3	39.30	18.44	0	0.00	4.27	3	39.30	2	22.71
11	Karnataka	3	59.46	23.80	0	0.00	0.00	3	59.46	0	23.80
12	Kerala	4	279.74	63.68	0	0.00	55.22	4	279.74	0	118.90
13	Manipur	22	109.34	66.34	0	0.00	24.36	22	109.34	19	90.70
14	Meghalaya	0	0.00	3.81	0	0.00	0.00	0	0.00	0	3.81
15	Mizoram	2	9.13	14.48	0	0.00	1.93	2	9.13	0	16.41
16	Nagaland	11	49.35	28.96	3	37.38	31.04	14	86.73	9	60.00
17	Orissa	67	169.00	101.12	1	62.32	0.00	68	231.32	60	101.12
18	Puducherry	1	139.67	7.50	0	0.00	0.00	1	139.67	0	7.50
19	Punjab	5	153.40	40.43	0	0.00	0.00	5	153.40	0	40.43
20	Sikkim	28	104.92	83.69	17	261.40	8.15	45	366.32	21	91.84
21	Tamilnadu	5	635.54	59.82	0	0.00	0.00	5	635.54	0	59.82
22	Tripura	11	26.57	23.62	0	0.00	0.00	11	26.57	8	23.62
23	Uttar Pradesh	26	667.57	290.69	3	291.70	111.22	29	959.27	6	401.91
24	Uttrankhand	12	119.82	49.63	10	715.72	153.98	22	835.54	8	203.61
25	West Bengal	17	1822.08	643.26	1	438.94	146.14	18	2261.02	6	789.40
	Total	420	7857.08	3566.00	99	5344.15	1157.08	519	13201.23	297	4723.08

ANNEXURE REFERRED TO IN REPLY TO PARTS (a) to (c) OF LOK SABHA STARRED QUESTION NO.62(PRIORITY NO-2) FOR ANSWER ON 21.07.2016 REGARDING “FLOOD MANAGEMENT PROJECTS”

Sl. No	State	Area protected in lakh ha	Population benefited in Lakh
1	Arunachal. Pradesh	0.566	0.697
2	Assam	4.871	97.848
3	Bihar	10.522	70.92
4	Goa	0.002	0.15
5	J&K	0.9	0
6	Manipur	0.28	1.582
7	Nagaland	0.004	0.6
8	Orissa	1.556	7.202
9	Sikkim	0.201	2.397
10	Uttar Pradesh	0.538	4.005
11	Uttrankhand	0.001	0.053
12	West Bengal	0.15	11.81
13	Tripura	0.002	0.013
	Total	19.593	197.277

**ANNEXURE REFERRED TO IN REPLY TO PARTS (a) to (c) OF LOK SABHA STARRED QUESTION NO.62
(PRIORITY NO-2) FOR ANSWER ON 21.07.2016 REGARDING "FLOOD MANAGEMENT PROJECTS"**

**State/UT- wise Status of Appraisal of Flood Management Projects Received in CWC and GFCC during XII Plan
(Rs. In crore)**

S N	State / UT / Organisation	Received		Cleared		Returned/ deleted		Compliance pending from States		Under Examination	
		Nos	cost	No s	cost	No s	cost	No s	cost	No s	cost
A	Status of Appraisal in CWC										
1	Assam	135	11756.07	54	1625.34	4	137.76	65	7781.69	12	2211.21
2	Arunachal Pradesh	24	590.66	12	176.45	1	10.00	10	312.21	1	92.00
3	Manipur	6	2226.40	0	0.00	5	1599.17	1	627.23	0	0.00
4	Meghalaya	9	441.64	0	0.00	1	12.78	5	425.05	3	3.81
5	Mizoram	4	45.44	0	0.00	0	0.00	4	45.44	0	0.00
6	Nagaland	26	385.54	8	62.40	4	44.26	14	278.95	0	0.00
7	Sikkim	18	356.78	17	261.40	0	0.00	1	95.38	0	0.00
8	Tripura	4	273.90	3	188.98	0	0.00	0	0.00	1	84.92
9	Br. Board	22	897.78	10	208.98	2	147.53	6	83.86	4	457.41
10	west Bengal	7	145.59	0	0.00	0	0.00	3	114.40	4	31.19
11	Karnatka	8	360.99	7	290.36	0	0.00	1	70.63	0	0.00
12	Kerala	11	3329.54	1	255.34	0	0.00	10	3074.20	0	0.00
13	Tamilnadu	2	7028.00	0	0.00	2	7028.00	0	0.00	0	0.00
14	Lakshadweep	1	9.36	0	0.00	0	0.00	1	9.36	0	0.00
15	Chattishgarh	21	254.20	0	0.00	21	254.20	0	0.00	0	0.00
16	Rajasthan	1	9.10	0	0.00	0	0.00	1	9.10	0	0.00
17	Himachal	9	2398.89	7	1181.28	0	0.00	2	1217.61	0	0.00
18	Haryana	1	181.42	0	0.00	1	181.42	0	0.00	0	0.00
19	J&K	104	6966.73	43	1140.94	2	51.70	51	5649.88	8	124.21
20	Punjab	10	727.39	7	310.09	0	0.00	2	132.32	1	284.98
21	Andhra Pradesh	2	1125.70	0	0.00	2	1125.70	0	0.00	0	0.00
22	Goa	2	22.73	2	22.73	0	0.00	0	0.00	0	0.00
23	Puducherry	1	139.67	1	139.67	0	0.00	0	0.00	0	0.00
24	Maharashtra	2	39.02	1	24.37	1	14.65	0	0.00	0	0.00
25	Telangana	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
26	Odisha	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
27	Madhya Pradesh	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
28	Gujarat	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
29	UP	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
30	Delhi	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
	Sub-Total (CWC)	430	39712.53	173	5888.32	46	10607.16	177	19927.31	34	3289.73
B	Status of Appraisal in GFCC										
1	Bihar	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
2	Jharkhand	1	0.00	1	0.00	0	0.00	0	0.00	0	0.00
3	Himachal Pradesh	1	0.00	1	0.00	0	0.00	0	0.00	0	0.00
4	Rajasthan	2	0.00	0	0.00	0	0.00	0	0.00	2	0.00
5	Uttarakhand	53	0.00	41	0.00	5	0.00	0	0.00	7	0.00
	Uttarakhand Special Package	1	532.27	1	532.27	0	0.00	0	0.00	0	0.00
6	Uttar Pradesh	39	31.69	39	31.69	0	0.00	0	0.00	0	0.00
7	West Bengal	10	90.98	0	0.00	0	0.00	0	0.00	10	90.98
	Sub-Total (GFCC)	107	654.94	83	563.96	5	0.00	0	0.00	19	90.98
	Grand Total	537	40367.47	256	6452.28	51	10607.16	177	19927.31	53	3380.71

ANNEXURE REFERRED TO IN REPLY TO PARTS (d) & (e) OF LOK SABHA STARRED QUESTION NO.62(PRIORITY NO-2) FOR ANSWER ON 21.07.2016 REGARDING “FLOOD MANAGEMENT PROJECTS”

State-wise Details of Flood Forecasting Network

Sl. No.	State	Existing Flood Forecasting Stations	Additional Flood Forecasting Stations proposed to be installed	Total flood Forecasting Network after expansion
1	Andhra Pradesh	8	9	17
2	Arunachal Pradesh	1	2	3
3	Assam	25	4	29
4	Bihar	32	2	34
5	Chhattisgarh	1	0	1
6	Gujarat	11	1	12
7	Haryana	1	1	2
8	Himachal Pradesh.	0	1	1
9	Jammu & Kashmir	1	4	5
10	Jharkhand	5	15	20
11	Karnataka	8	0	8
12	Kerala	0	2	2
13	Madhya Pradesh	3	1	4
14	Maharashtra	9	1	10
15	Manipur	0	0	0
16	Odisha	12	2	14
17	Rajasthan	0	12	12
18	Sikkim	0	8	8
19	Tamil Nadu	1	13	14
20	Telangana	8	5	13
21	Tripura	2	0	2
22	Uttar Pradesh	35	5	40
23	Uttarakhand	3	4	7
24	West Bengal	14	0	14
25	NCT Delhi	2	0	2
26	Dadra & Nagar Haveli	1	0	1
Total		183	92	275