

(b) and (c). In *in vitro* studies, the oil of the leaves, seeds and bark of neem have shown a wide spectrum of anti-bacterial activity against a wide range of gram negative and positive bacteria, including *Mycobacterium tuberculosis*, *Klebsiella pneumoniae* and *Vibrio cholerae*. Neem has also been reported to be effective against certain human fungi. The leaf extract has also been shown to produce total inhibition of plaques of vaccinia, chikungunya and measles viruses.

(d) and (e). The Post-Graduate Institute of Medical Education and Research (PGIMER), Chandigarh, has reported that they have developed an indigenous method for extracting of neem solution from its leaves. The patients operated upon after using the extract for skin preparation did not develop wound infection. Further studies need to be conducted as it is at the experimental stage.

### Modernisation of Irrigation Projects

\*279. SHRIMATI SURYA KANTA PATIL: Will the Minister of WATER RESOURCES be pleased to state:

(a) whether the Government have received any proposals for modernisation of irrigation projects;

(b) if so, the details thereof;

(c) the action taken by the Union Government in this regard;

(d) whether the Union Government have provided any special assistance to States for this purpose; and

(e) if so, the details thereof?

THE MINISTER OF WATER RESOURCES AND MINISTER OF PARLIAMENTARY AFFAIRS (SHRI VIDYACHARAN SHUKLA): (a) to (e). A *Statement* is attached.

### STATEMENT

*Details of proposals for modernisation of irrigation projects received at the Centre for techno-economic appraisal during last 5 years.*

Sl. No.	Name of the Project	Estimated cost (Rs. in crores)	Date of receipt in Central Water Commission	Status of appraisal
1	2	3	4	5

#### Andhra Pradesh

##### Major

1.	K.C. Canal Modernisation	198.00	2/94	The State Government is required to submit detailed report after compliance of the Observations of the Central Water Commission.
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1	2	3	4	5
2.	Godavari Delta Modernisation	226.00	2/91	Sent back to the State Government in 6/91 for submission of Modified report.
3.	Penner Delta System Modernisation	120.00	1/91	Sent back to the State Government in 8/91 for submission of modified Project.

**Bihar***Major*

1.	Dhaka Canal Modernisation	37.23	10/90	The Project has been sent back to the State Government in 2/91 due to its non-inclusion in the VIII Plan.
2.	Modernisation of Sone Canal Phase-I	235.93	5/93	Found acceptable by Advisory Committee in 11/93 subject to environmental clearance and concurrence of State Finance Development.

**Gujarat***Major*

1.	Modernisation of Muchha I	8.12	2/91	The Project has been found acceptable by the Advisory Committee in 8/93. The State Government is required to obtain environmental clearance and convey the concurrence of the State Finance Department.
2.	Providing Hydro Plus Fuse Gates on Wanak bori Weir	8.58	7/93	Investment clearance given in 3/94.

1	2	3	4	5
3.	Integrated Irrigation Development Project	235.00	10/92	Sent back to State Government in 2/93 for submission of modified report.
<i>Medium</i>				
1.	Restoration of Mitti	14.51	6/93	The State Government is required to sort out various techno-economic issues.
<b>Haryana</b>				
<i>Major</i>				
1.	Water Resources Consolidation	1506.79	10/93	The State Government is required to sort out various techno-economic issues.
<b>Jammu &amp; Kashmir</b>				
<i>Major</i>				
1.	Modernisation of Ranbir Canal	64.71	1/92	The State Government is required to sort out various techno-economic issues.
<i>Medium</i>				
1.	Modernisation of New Pratap Canal	6.09	1/92	-do-
2.	Modernisation of Kathura Canal	8.47	1/92	-do-
3.	Modernisation of Dadi Canal	4.40	2/90	Sent back to the State Government in 3/91 for submission of modified report after compliance of the observation of the Central Water Commission.

1	2	3	4	5
<b>Kerala</b>				
<i>Major</i>				
1.	Modernisation of Neyyar Irrigation Project	17.25	6/92	The State Government is required to submit modified report after compliance of the observation of the Central Water Commission.
2.	Kerala Composite irrigation project	1410.46	7/92	Sent back to State Government in 8/92 for submission of detailed Project report.
<b>Madhya Pradesh</b>				
<i>Major</i>				
1.	Sindh Phase II	510.94	12/90	Found acceptable by the Advisory Committee in 12/92 subject to clearance from forest angle and concurrence of the State Finance Department.
<b>Orissa</b>				
<i>Major</i>				
1.	Jakodia Renovation Scheme	27.39	8/89	Project was sent back to the State Government in 12/89 for submission of modified report after compliance of the observations of Central Water Commission.
2.	Delta Development Plan (Mahanadi Delta Command)	600.73	11/90	The State Government is required to submit modified report after compliance with the observations of Central Water Commission.

1	2	3	4	5
<b>Punjab</b>				
<i>Major</i>				
1.	Remodelling of Upper Bari Doab Canal	105.67	1/94	State Government is required to submit detailed Project Report after compliance with observations of Central Water Commission.
2.	Modernisation of Extension of Badshahi Canal on left side of River Ravi.	6.91	5/94	The Project has been received recently.
<b>Rajasthan</b>				
<i>Major</i>				
1.	Modernisation of Ganga Canal System	250.84	3/93	The Project was sent back in 11/93 for submission of modified report in two Phases.
2.	Modernisation of Parvati Canal	10.95	3/91	The State Government is required to submit modified report after compliance of observations of Central Water Commission.
<i>Medium</i>				
1.	Gambhiri Modernisation	16.71	8/89	The State Government is required to submit updated cost estimates of the Project.
<b>Uttar Pradesh</b>				
<i>Major</i>				
1.	Raising of meja Dam	52.18	3/92	The State Government has been advised by the Advisory Committee to complete the Project within the estimated cost of Rs. 52.18 crores.

1	2	3	4	5
2.	Lining of Channel in Bundelkhand and Baghelkhand region	57.37	5/92	Found acceptable by the Advisory Committee in 6/94 subject to environmental clearance, concurrence of State Finance Department and allocation of adequate fund by State Government.
3.	Ghaggar Canal Modernisation	0.26	4/90	Sent back to State Government in 10/91 for submission of modified report compliance of observations of Central Water Commission
4.	Upper Ganga Modernisation	467.76 (Investment after clearance given in 7/92)	3/91	

**Tamil Nadu***Major*

1.	Water Resources Consolidation Project	1102.84	4/94	Sent back to State Government in 5/94 for submission of detailed Project Report.
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**West Bengal***Major*

1.	Modernisation of Kangsabati Project	329.07	1/91	State Government is required to submit modified Project after complying with the observations of the Advisory Committee.
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**Note:** Central assistance to the States is in the form of block loans and grants not tied to any sector of development or the project.