

(iv) augmentation of the transmission and distribution systems by the various State Electricity Boards.

(c) Power shortage is one of the contributing factors for loss in production. However, there is no machinery to assess the loss in production and the loss in man hours in various industries due to power shortage alone.

#### Projects at the National Institute of Oceanography

7707. SHRIMATI SANYOGITA RANE: Will the Minister of ENERGY AND COAL be pleased to state:

(a) the projects currently in progress at the National Institute of Oceanography; and

(b) the details thereof?

THE MINISTER OF STATE IN THE MINISTRY OF ENERGY (SHRI VIKRAM MAHAJAN): (a) 27 projects are in progress at the National Institute of Oceanography, Goa. These are grouped under the following eight areas:—

1. Food from the sea,
2. Minerals from the sea,
3. Energy from the sea,
4. Drugs from the sea,
5. Coastal zone management,
6. Protection of Marine Environment from pollution,
7. Marine sciences instrumentation, and
8. Ocean Engineering.

(b) The details about the each project are as under:—

##### 1. *Food from the sea:*

Charting the fertility and production potential of the Indian seas; Identification of new fishery resource and new fishing grounds; Generating more seafoods by utilizing different aquatic ecosystems; Development of mass

culture techniques of live feeds for the enhancement of culture of marine organisms; Mari-culture or sea farming technology.

##### 2. *Minerals from the sea:*

Demarcation of areas for Mineral exploration and detailed survey of specific areas to locate mineral deposits and evaluation of their formation and total potential in different regions, utilization of knowledge gained and expertise developed in marine geology and geophysics for providing assistance in seabed surveys for development of offshore oil-fields and major harbours.

##### 3. *Energy from the sea:*

Estimation of energy potential in the seas around India from waves, tides and thermal gradients (ocean thermal energy conversion); identification of suitable sites in the country for setting up plants for ocean thermal energy conversion and for extraction of tidal energy; design and development studies in laboratory and in field for extraction of energy from the sea.

##### 4. *Drugs from the sea:*

Screening of suitable extracts of marine organisms for their biological activity; isolation of active constituents and their structural elucidation with a view to obtaining new potential drugs and drug-intermediaries.

##### 5. *Coastal zone management:*

Understanding shore line dynamics with reference to beach erosion and sediment transport along selected segments of the coast. Estuarine dynamics with reference to disposal and dispersal of domestic and industrial wastes; wave and storm surge forecasting and development of suitable mathematical models for fog prediction.

##### 6. *Protection of marine environment from pollution:*

Identification of levels of pollutants

in different regions, effects of man-made changes in the environment and pathways of pollutions; advising public and private sector undertakings on problems of disposal of sewage and industrial effluents in the sea and estuaries.

#### 7. Marine Instrumentation:

Development of marine instruments such as telemetry, data acquisition system, data logging system, and underwater acoustic instruments.

#### 8. Ocean Engineering:

Development of suitable designs of jetties, minor harbours, platforms, spar buoys, mooring buoy systems and wave sledge, and shallow penetration systems for collection of undisturbed samples from sea bed sampling and testing equipment; development of laboratory and field testing techniques for studying geotechnical problems relating to submarine pipelines, piled structure, seabed Anchors, other Coastal Engineering structures and offshore platforms.

#### Rate of compensation paid to the Pong Dam oustees

7708. SHRI NIHAL SINGH: Will the Minister of ENERGY AND COAL be pleased to state:

(a) what is the rate of compensation paid to the Pong Dam oustees for taking over their land in the construction of Pong Dam in the year 1974-75;

(b) whether it is a fact that the rate of compensation paid to these oustees has been at a lower scale than the prescribed rates and these oustees have filed petitions in the various courts for the payment of revised rates of compensation and their petitions have been upheld by these courts;

(c) if so, what are the details of the judgements of the courts and by

when Government propose to ensure that revised rates of compensation are paid with interest thereon to these oustees; and

(d) if not, what are the reasons therefor?

THE MINISTER OF STATE IN THE MINISTRY OF ENERGY (SHRI VIKRAM MAHAJAN): (a) to (d). The rates of compensation have been paid as per awards given by the Land Acquisition Collector. They differ from tikka to tikka. Any person dissatisfied with the Award of the Land Acquisition Collector can file objections under sec. 18 of the Land Acquisition Act, 1894 with the Land Acquisition Collector, which is forwarded to the District Judge for fresh adjudication of market value. Out of 7799 references forwarded by the Land Acquisition Collector to the District Judge till June 1980, for fresh adjudication of market value, 3799 cases had been decided, the District Judge enhancing the compensation in respect of 3034 references, and deciding 765 references in favour of the Land Acquisition Collector. The Project administration has gone in appeal against the enhancement made by the District Judge in 2038 cases. No final decision on these cases has been given by the High Courts. Compensation at enhanced rates is being disbursed on receipt of specific orders of the High Court on stay applications for release of the amount on surety.

#### Medium and Major Irrigation Projects under survey in Orissa

7709. SHRI GIRIDHAR GOMAN-GO: Will the Minister of IRRIGATION be pleased to state:

(a) the names of the medium and major irrigation projects under the survey and investigation in Orissa State is in progress by that State;

(b) funds provided by that State for investigation and survey of the irrigation potential for the Fifth Plan and completed the same; and

(c) the medium and major projects to be included for execution in the Annual Plan of Sixth Plan, the names of the projects thereof?

THE MINISTER OF IRRIGATION (SHRI KEDAR PANDEY): (a) The Government of Orissa have reported that 65 major and medium irrigation projects are under survey and investigation in the State to establish feasibility.

(b) During the fifth Plan 1974-75 to 1977-78, an expenditure of Rs. 218 lakhs was incurred by the State on Surveys and investigation. During the years 1978-79 and 1979-80, the expenditure incurred on this account was Rs. 125 lakhs.

(c) A list showing the names of major and medium, irrigation projects included by the Government of Orissa in their Draft annual Plan 1980-81 i.e. the first year of the Sixth Plan is enclosed.

#### Statement

#### MAJOR

1. Rengali Irrigation (Small Barrage and Canals)
2. Upper Kolab Irrigation.
3. Mahanadi Delta
4. Salandi
5. Anandpur
6. Upper Indravati Irrigation
7. Mahanadi Birupa Barrage
8. Samakoi

#### MEDIUM

1. Ramiala
2. Ong
3. Dahuka
4. Sundar
5. Saipala
6. Kalo
7. Dadaraghati
8. Khadkai
9. Remal

10. Ramanadi
11. Daha
12. Nesa
13. Pilasalki
14. Dumer Bahal
15. Gohira
16. Sunei
17. Aunli
18. Kuanria
19. Jharbandh
20. Sarafgarh
21. Talasara
22. Harabhangi
23. Kanjhari
24. Badanala
25. Hariharjore
26. Upper Suktal
27. Baghua Stage II
28. Bandapipili
29. Bankbal
30. Barsuan
31. Kansabahal
32. Upper Jonk
33. Derjang Stage II
34. Salia Stage II

#### MODERNISATION SCHEMES

1. Modernisation of Rushikulya System
2. Extension and Improvement to Hirakud Dam Project.
3. Baladiha

#### Power Supply from D.V.C. to the Integrated Steel Plant

7710. SHRI M. RAM GOPAL REDDY: Will the Minister of ENERGY AND COAL be pleased to state:

(a) whether it is a fact that power supply from D.V.C. during April—June, 1980 to the integrated steel plants was consistently below the safety level; and

(b) if so, the reasons therefor?

THE MINISTER OF STATE IN THE MINISTRY OF ENERGY (SHRI