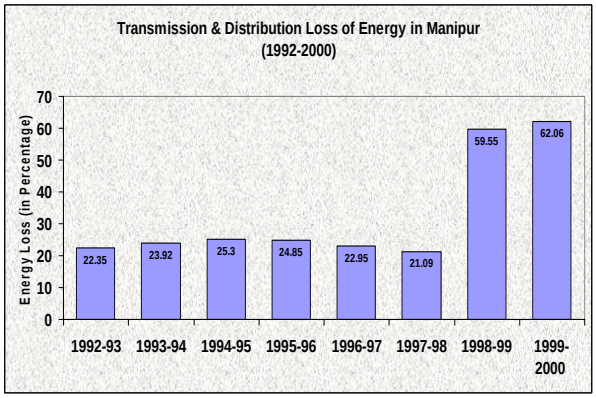
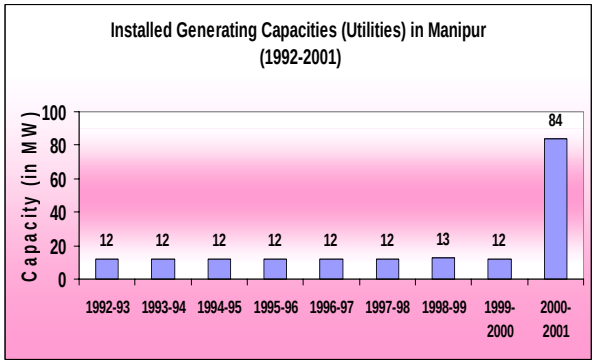
Chapter: X POWER

J : Power scenario :

Although Manipur has Hydro Power potential of 2000 MW, at the moment the power Sector of the state is by and large **"powerless"** to meet even domestic requirement of 1,74,127 consumers (all inclusive). We have utilised only 5%. Tapping of 60% of the potential will serve all purposes including earning handsome revenue. The state purchases 438 MV from NEEPCO and NHPC (central undertakings) in 2005-06. The gap between demand and supply remains constant in spite of so-called attempt of 3918 existing staff. In 2003-04, the gap was highest with 48% followed by 39% in 2005-06.

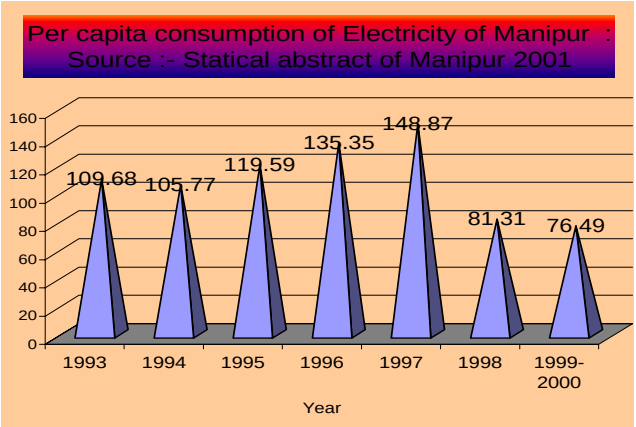


Source: Energy. (CMIE) April 2002



Source : Lok Sabha Starred Question No. 164, dated 14.03.2002 and Rajya Sabha Unstarred Question No.856, dated 27.11.2002.

Our peak requirement in 2005-06 is 189 MW as against 115 MW; - peak demand met. The level of power consumption is fairly low. The per capita power consumption is only 146 KWH in 2004-05 while the All India Average is 354 KWH, and while that of Daman and Diu is 2335 KWH, that of Gao is 724 KWH, that of Pondicherry 867 KWH and that of Delhi 577 KWH (1996-97).



The state has so far completed 8 projects while the biggest one namely Loktak Hydro Electric Power Project has been undertaken under Central Sector.

Table : 80

Sl. No.	Name of project	Capacity (MW)	Type
1.	Loktak Hydro Electric Power Project.	3 x 35	Hydro.
2.	Leimakhong I MH	2 x 0.300	Hydro.
3.	Imphal	5.296	Diesel Power.
4.	J.N. Hospital	0.100	-do-
5.	Assembly	0.400	-do-
6.	Governor	0.144	-do-
7.	Khuman Lampak	0.376	-do-
8.	Parbhung	0.200	-do-
9.	Leimakhong Power Plant	36.00	Heavy Fuel Based.

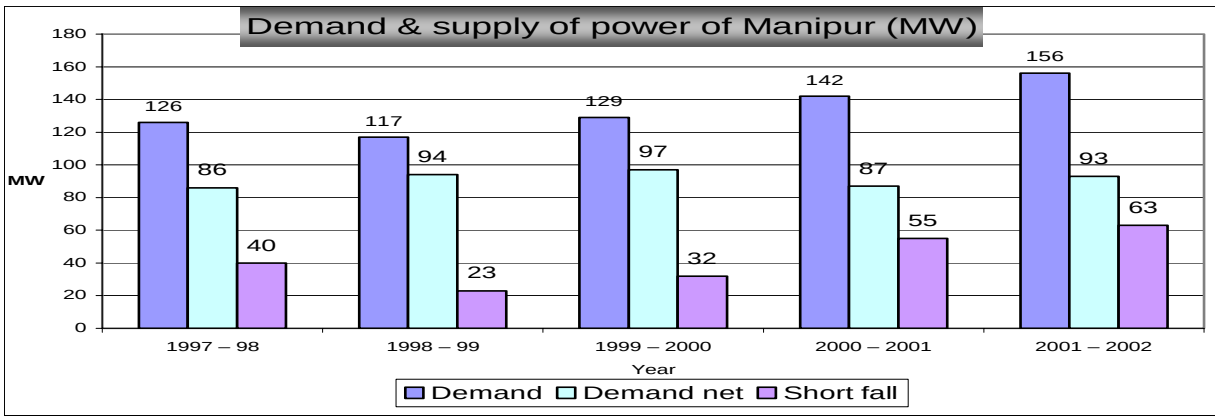
(Source:- Govt. of Manipur, Department of Power, Annual Administrative Report, 2005-06).

The state is proposing to undertake the following hydro-project in near future:-

Table : 81

Sl. No.	Name of project.	Capacity.	Type.
1.	Irang	4 x 15 MW	Hydro
2.	Tuivai	3 x 17 MW	-do-
3.	Chakpi/Phunchang	3 x 200 KW	-do-
4.	Chakpikarong	3 x 200 KW	-do-
5.	Iring	3 x 100 KW	-do-
6.	Ijai	3 x 500 KW	-do-
7.	Tupul	3 x 300 KW	-do-
8.	Loktak Down Stream (Central)	90 MW	-do-
9.	Tipaimukh (Central)	1500 MW	-do-

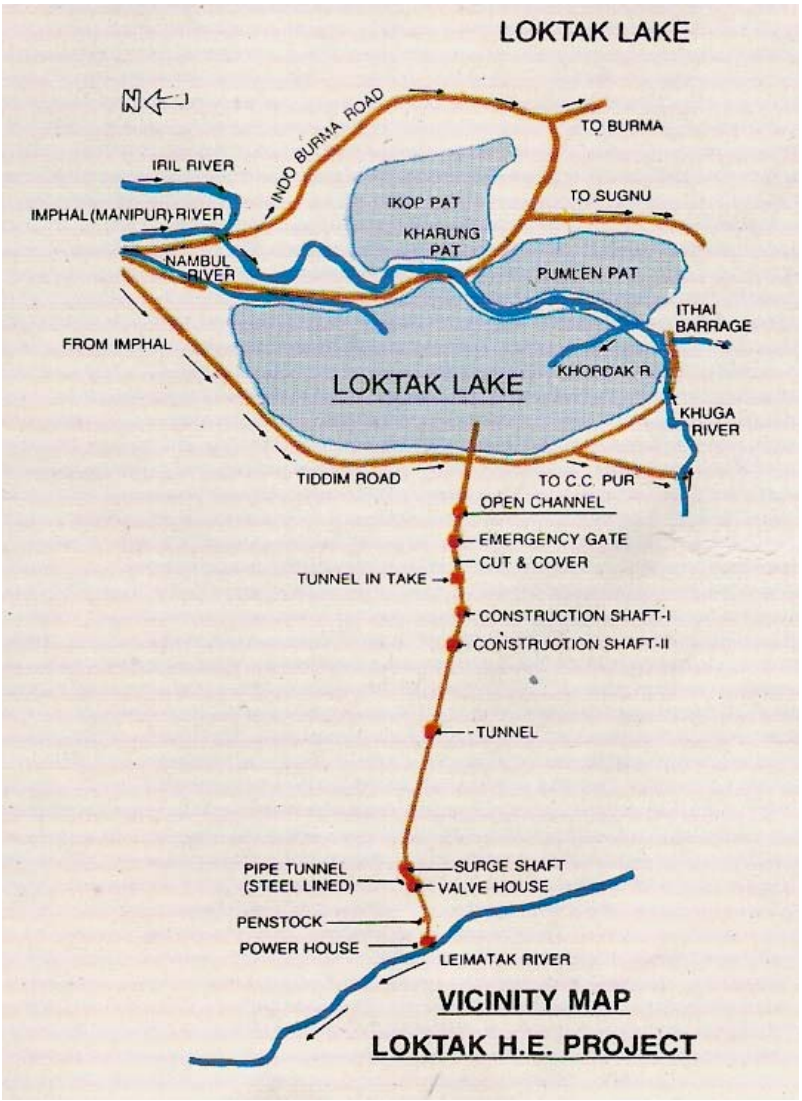
(Source:- Govt. of Manipur, Department of Power, Annual Administrative Report, 2005-06).



J : 2 : Loktak Hydro Electric Project:-

A special reference is made to the Lokatk Hydro Electric Project, better known as "Loktak Project", located at Ningthoukhong 39 km from Imphal. Manipur enjoys agreed entitlement of 12% (52.925 MV) of the total power of 105 MWH, - because of the fact that water diversion from Loktak Lake to the extent of 58.5 cumecs is allowed for generation of power by the National Hydro Electric Power Corporation. The project, commissioned in 1984, has power channel of 3.40 km and Head Race Tunnel of 6.62 km constructed under Austrian Tunneling Method.

The Ithai Barrage, the scapegoat of all the woes of Loktak lake, (A:10.7 m high with 5 X 10 m water ways) across the Manipur River is key to maintaining the level at 786.5 meter to ensure steady flow of water from the lake into the narrow Leimatak River which is at the elevation of 312 meters lower than the lake; - thus generating electricity through a well-planned water conducting system.



The "Loktak Project" is a rare outcome of combined interaction between a precious Gift of Manipur (Loktak Lake) and scientific intervention of the Central Government. The surface area of the lake is 287 sq. km. and direct catchment area 980 sq. km.;- fairly large and extensive. In a way this "**baby" project" belongs to "Mother Loktak"**; whose health, very unfortunately, is under mounting stress and strain imposed by manifold disturbing economic activities in and around the lake including acts of encroachment on the "lake-area". 50,400

fishermen right now do indiscriminate fishing in this **"troubled lake"** causing a visible threat to the very foundation of sustainability of both lake and project.

Out of the direct catchment area of 980 sq. km. of the lake, 430 sq. km. is under paddy cultivation, 150 sq. km. under habitation and 400 sq. km. under forest. A very disturbing institutional behavior is seen. Besides, the growth of floating **weedmats** (locally called Phumdis) is visibly prolific and on the rise dramatically. The area covered by the thick mass floating weedmats (Phumdis) account for 47% of the lake area. Open water decreases **by 48.45 p.c. while Phumdis increases by 15.63 p.c. during 1989-2002.**

Jhum cultivation, extensive deforestation and unscientific land use practices in the catchment areas are responsible for deposition of 6,50,000 tones of **silt** annually in the lake. This trend is dangerous and **bad** for Loktak Lake; **worse** for Loktak Hydro Electric Project and **worst** for the state of Manipur. It is really interesting to make a mention of the fact those three districts; (a) Imphal west District, (b) Bishnupur District and (c) Thoubal District are involved in the matter and issue of Loktak Lake. Till today the "ownership" of the lake has not been defined and declared. The authority, perhaps, is not fully aware of the fact that maintaining Loktak Lake at optimum level means maintaining the Loktak Project also at optimum level. **The visible lack of a Scientific Integrated Approach to systematic utilization of multiple advantages thrown open by Loktak Lake is, perhaps, the root cause of rising concern. The attempt of Loktak Development Authority is both ("marginal" and "isolated").**

Unless all these institutional issues including gap of mutual appreciation between the State and Central authorities are settled in the right perspectives, the lifelines of Manipur; i.e. Loktak Lake and Loktak Project may in a near future, face the danger of **gradual deterioration** and **subsequent disappearance**. The sustainability of both the Lake and Project is now questioned.