A STUDY ON THE GENARATION OF HYDRO ELECTRICITY BY VARIOUS HYDRO POWER STATION IN TAMILNADU FROM THE YEAR 1992-93 TO 2011-2012

V.S.MURALI, M.KOTTESHWARI

Abstract: The success of economic growth in an economy with sustainable development critically depends upon the macro environmental coupled with infrastructural development. Among various infrastructural facilities electricity plays a dominant role in the development of any economy. As such power development is one of the key inputs for the overall socio-economic development of a state. The electricity (supply) Act was passed in 1948 for the rationalisation of the production and supply of electricity. In the first plan period emphasis was placed on exploiting hydel potential in the state due to the fact to the cost of generation from hydel sources was the lowest when compare to other technologies prevailing in the state. Hydro power is renewable, economic, and non-polluting sources of energy. Hydro power have the ability of quick staring , stopping and load variation offering operational flexibility and helps in improving reliability of power system. Hydro electricity in TamilNadu began in 1900 when a Tea estate setup in a tiny hydroelectric power station to generate electricity for its own consumption.

Introduction: Recently Tamil Nadu is facing the huge power shortages. Next to thermal power station hydro power station generates more units of power but recently the generation of hydro power has been decreased. An attempt has been made in this paper to study the various hydro power station's generation and generating capacity of the hydro power stations have also been discussed especially after post liberalisation era.

Objectives

1. To analyse the power generation of various hydro power station.
2. To analyse the installed capacity of various hydro power station.

Methodology: This paper mainly attempts to study the hydro power generation through its power plants and generating capacity of various hydro power stations in Tamil Nadu. For this, the study mainly depended on secondary data which is collected for 20 years from 1992-93 to 2011-12 from the following sources:

1. TNEB, statistics at a glance , 2008 Report
2. Statistical handbook of Tamil Nadu
3. Tamil Nadu economic appraisal
4. Directorate of statistics

Table . 1 deals with the generation of hydro power by various hydro power stations and Table .2 deals with the installed capacity of various hydro power stations. In this study bar diagram is used to show the hydro station power generation comparison between early and recent years i.e 1993-94 and 2011-12 and installed capacity of different power stations comparison has been shown between the years 1992-93 and 2011-12.

Analysis:

Hydro Stations Generation:

The generation of hydro electricity by various hydro power stations are shown in table. 1

From table .1 we can see that in Tamil Nadu there are different power stations located in various areas. Among that kundah-2 power station has generated maximum units of electricity i.e843.465 MU during 1992-93 but in the year 2011-12 it has been declined to 577.770 MU due to less rainfall in catchment areas. Power stations namely mettur tunnel, periyar, pykara, kudah-1, kudah-3, Sholayar has generated more units of power i.e above 300 upto 850MU during 1992-93 the installed capacity of mettur tunnel is 675.585 MU, periyar 605.735MU , pykara 434.058MU kudah-1 - 327.70MU, kudah-3- 379.533MU and sholayar -1 308.71 MU but in between years there was wide fluctuations in the generation. But recently in 2011-12 the generation has been declined against the previous years due to inadequate rainfall and less storage of water. Lower mettur has generated 440.435MU in the year 1992-93 and from the year 1995-96 lower mettur has been divided into 4 units i.e L.M.H.E.P-1 , L.M.H.E.P-2, L.M.H.E.P-3 , L.M.H.E.P-4 and from the year 1999-2000 it was combined and again it was divided into 4 units from the year 2004-05. From the table we can see that lower mettur shows the increase in the generation of power in recent year. Power stations like moyar, kudah-4mettur dam, sarkarpathy, aliyar, suriliyar, papanasam, kodayar-1 has generated between the range from 100 to 250MU of power during 1992-93. But there was decrease in the generation during 2011-12. Even though there is ups & downs in the generation.

Kudah -5 , sholayar-2 and kodayar-2 has generated between 50 to 100 MU of power during 1992-93. These station's generation also got decreased in recent years. Initially during the period 1992-93 kadampari has generated low units of power i.e 6.350 units but due to favourable natural condition there is tremendous growth is shown in the year 2011-12 i.e 510.537MU.

TABLE 1 - HYDRO STATION GENERATION (UNITS IN MILLION UNITS)

POWER STATION	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-2000	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
PYKARA	434.058	348.732	379.912	368.668	381.064	392.04	351	363	344	377.402	251.360	141.916	211.464	255.967	170.802	160.06	60.06	NA	28.962	39.644
MOYAR	171.268	143.503	150.721	139.579	152.032	161.45	137	151	148	163.058	103.058	55.506	89.455	175.921	173.634	180.419	132.29	NA	155.486	131.647
KUNDAH-1	327.70	283.495	264.40	316.659	216.882	327.99	232	229	295	238.759	128.884	72.994	245.925	326.227	343.342	346.825	284.83	NA	255.860	218.207
KUNDAH-2	843.465	709.777	680.725	749.652	574.292	806.75	574	543	739	576.549	316.079	171.890	668.681	857.263	845.096	902.823	753.06	NA	656.718	577.770
KUNDAH-3	379.533	408.592	391.950	411.560	370.613	503.37	368	341	433	348.282	250.950	122.979	416.179	517.485	521.575	550.726	439.84	NA	391.088	350.092
KUNDAH-4	194.731	147.099	202.661	146.491	160.950	177.34	166	144	142	125.374	71.417	40.429	162.229	190.543	205.227	225.663	137.85	NA	137.145	156.757
KUNDAH-5	98.561	63.798	78.747	81.945	68.543	94.15	57	64	87	55.898	45.349	18.032	74.312	89.784	71.822	93.257	67.82	NA	60.699	53.260
METTUR DAM	140.344	71.466	150.487	53.558	77.519	137.58	119	89	83	94.273	43.245	15.074	25.311	90.390	91.401	152.248	90.651	NA	94.871	153.513
METTUR TUNNEL	675.585	335.865	759.864	340.184	340.912	484.88	530	457	623	318.546	90.232	69.008	308.223	639.443	655.504	593.628	453.35	NA	266.061	471.353
SARKARPATHY	135.653	114.337	159.720	161.355	121.468	99.11	120	128	159	150.334	95.206	52.020	114.479	115.107	150.240	153.492	128.739	NA	134.925	109.549
ALIYAR	207.949	176.103	209.759	153.522	166.866	181.57	196	168	183	120.262	107.764	86.095	160.749	203.806	174.541	183.529	152.64	NA	163.323	174.381
KADAMPARI	6.350	117.939	097	108.512	130.933	150.29	186	144	187	156.742	201.777	406.424	456.871	581.460	427.815	456.564	294.47	NA	572.140	510.537
SHOLAYAR-1	308.719	382.8177	345.098	307.220	332.391	289.51	231	217	326	221.220	266.672	147.619	269.757	306.147	315.988	375.293	235.56	NA	355.862	217.419
SHOLAYAR-2	62.750	40.188	68.861	59.562	62.226	66.52	88	57	56	31.907	37.472	52.427	81.465	82.880	62.976	64.158	65.78	NA	57.129	61.184
SURULIYAR	102.964	98.140	98.118	97.017	79.858	106.86	103	73	92	87.038	75.258	47.903	101.457	125.741	108.538	121.615	100.30	NA	98.138	115.570
PAPANASAM	105.368	105.045	143.655	108.390	78.586	91.56	112	116	125	98.273	65.062	46.037	89.037	129.763	145.336	137.266	137.69	NA	137.859	122.357
SERVALAR	25.148	N.G	46.572	25.239	12.37	27.39	32	40	35	24.471	17.942	17.402	35.376	53.949	41.678	47.371	34.59	NA	38.934	27.186
KODAYAR-1	204.012	78.758	299.085	166.824	145.027	171.08	132	143	237	151.043	108.940	105.710	136.294	154.473	225.181	201.251	191.54	NA	81.235	215.068
KODAYAR-2	95.283	84.229	101.645	70.259	64.380	75.35	71	79	98	66.449	45.460	45.676	71.582	90.234	88.881	84.078	89.99	NA	64.406	81.583
MARAVAKANDI	0.081	1.356	1.528	1.017	1.041	_NG	1	2	0	1.901	1.241	0.631	0.958	2.640	1.541	1.720	0.424	NA	2.002	0.762
PRIYAR	605.735	479.640	590.261	431.545	393.159	486.71	587	422	486	459.664	227.411	212.514	491.770	441.155	514.596	291.215	453.42	NA	430.093	535.435

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VAIGAI MICRO HYDEL	19.718	27.216	23.074	19.131	21.537	-	-	23	20	20.642	4.651	5.505	-	18.136	20.234	26.836	23.92	N.A	15.237	23.661
BAVANI SAGAR MICRO HYDEL	-	-	44.778	37.363	28.811	-	15	-	-	-	-	-	-	-	51.421	46.421	-	N.A	33.107	41.569
POONACHI MICRO HYDEL	-	1.477	1.538	0.555	2.714	-	3	2	-	1.817	-	3.969	3.998	5.401	2.153	1.532	0.209	N.A	4.525	1.476
PYKARA MICRO HYDEL	11.028	7.933	6.749	9.174	9.123	57.47	8	9	5	6.823	3.782	2.326	5.315	10.950	9.676	9.967	6.00	N.A	5.555	5.900
PUNACHI MINI LOWER	-	-	-	-	2.714	-	3	2	2	1.817	2.011	2.030	-	-	-	-	2.46	N.A	-	-
BAVANI MICRO HYDEL	39.859	36.724	-	-	28.11	-	-	39	31	27.862	17.892	8.695	38.492	37.780	51.645	46.248	44.74	N.A	-	-
LOWER METTUR	440.435	338.865	464.947	-	-	-	-	372	430	365.128	168.635	96.076	-	-	-	-	-	-	-	-
LMHEP-1	-	-	-	96.810	85.260	111.82	429	-	-	-	-	-	70.075	93.222	113.594	94	103.50	N.A	71.859	108.526
LMHEP-2	-	-	-	94.011	82.121	107.96	"	-	-	-	-	-	67.747	92.322	108.318	95.021	102.60	N.A	66.7771	84.947
LMHEP-3	-	-	-	87.787	29.304	101.21	"	-	-	-	-	-	63.639	88.316	108.075	92.401	104.35	N.A	68.021	106.559
LMHEP-4	-	-	-	54.206	67.433	86.880	"	-	-	-	-	-	54.206	67.433	86.880	73.614	87084	N.A	56.969	84.947
PERUCHANI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.094	1.162	2.46	N.A	2.692	0.945
AMARAVATHY	-	-	-	-	--	-	-	-	-	-	-	-	-	-	0.000	9.730	7.48	N.A	8.812	6.736
BAVANI SAGAR RBC	-	-	-	-	-	-	-	20	13	1.236	0.367	0.605	23.41	25.041	69.313	36.719	33.024	N.A	20.780	23.814
PUSHEP	-	-	-	-	-	-	-	-	-	-	-	-	-	189.362	281.043	474.750	391.76	N.A	431.622	131.647
SATHANUR DAM	-	-	-	-	-	-	-	9	16	16.203	1.583	2.432	10.210	23.359	8.503	5.182	12.91	N.A	10.257	10.775
PARSON VALLEY	-	-	-	-	-	-	-	-	64	34.966	16.941	18.300	55.378	53.388	59.395	53.251	41.17	N.A	39.375	35.876
THIRUMURTHY MINI	-	-	-	-	-	-	-	-	-	0.468	0.902	1.615	2.687	5.345	3.817	6.067	5.94	N.A	3.821	3.235
MUKURTHY	-	-	-	-	-	-	-	-	-	0.736	0.575	0.816	2.308	2.581	2.727	1.924	1.73	N.A	1.452	1.483
ALIYAR SMALL	-	-	-	-	-	-	-	-	-	-	-	-	1.845	7.597	4.273	10.826	10.96	N.A	8.597	6.696
BAVANI KATTALAI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	24.056	91.722	99.07	N.A	71.963	97.733
PERIYAR VAIGAI MICRO HYDEL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	N.A	1.058	97.933

Source:statistical hand book of Tamilnadu

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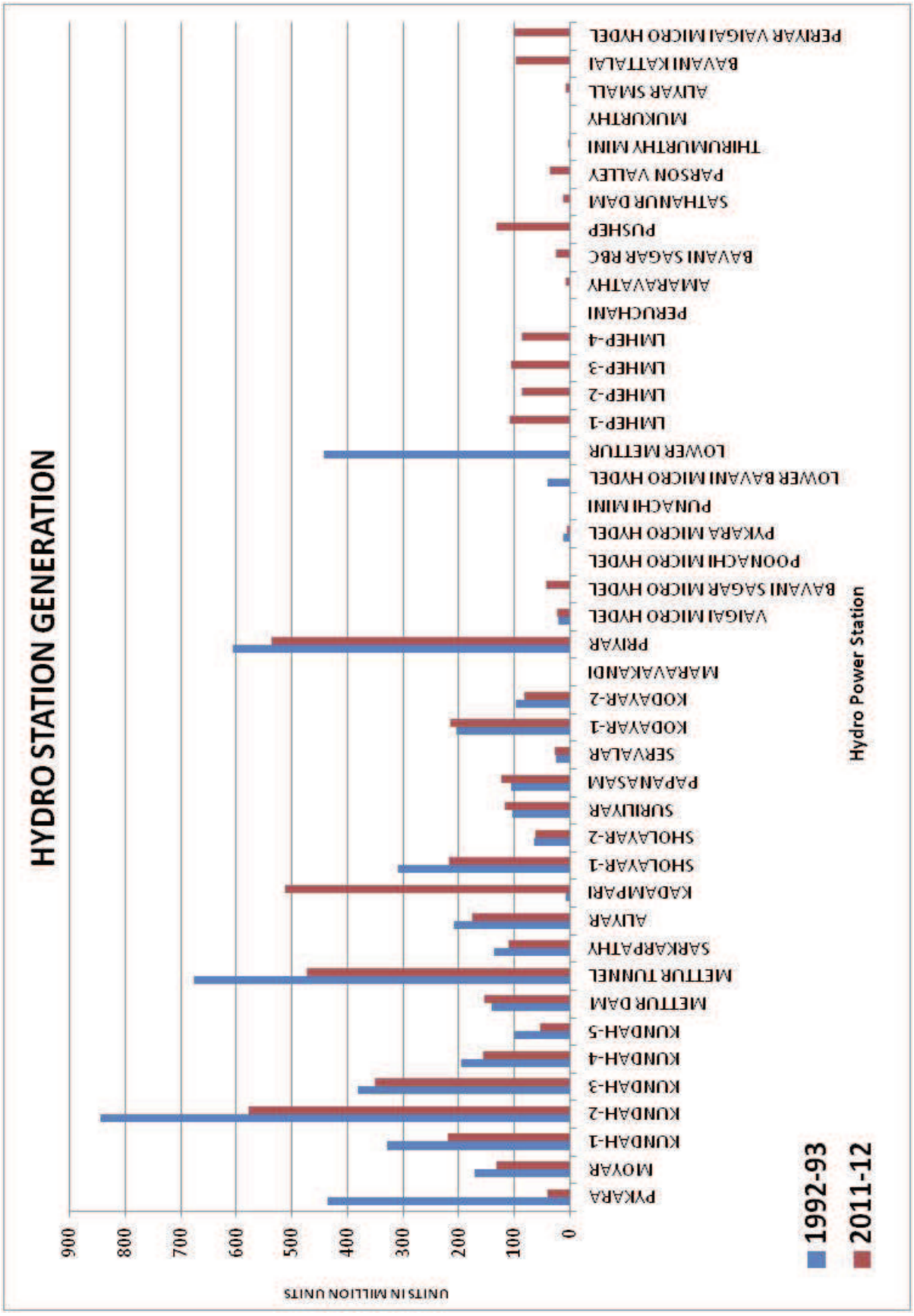
HYDRO STATION GENERATION
UNITS IN MILLION UNITS
0
100
200
300
400
500
600
700
800
900
1992-93
2011-12
Hydro Power Station
PYKARA
MOYAR
KUNDAH-1
KUNDAH-2
KUNDAH-3
KUNDAH-4
KUNDAH-5
METTUR DAM
METTUR TUNNEL
SARKARPATHY
ALIYAR
KADAMPARI
SHOLAYAR-1
SHOLAYAR-2
SURULYAR
PAPANASAM
SERVALAR
KODAYAR-1
KODAYAR-2
MARAVAKANDI
PRIYAR
VAIGAI MICRO HYDEL
BAVANI SAGAR MICRO HYDEL
POONACHI MICRO HYDEL
PYKARA MICRO HYDEL
PUNACHI MINI
LOWER BAVANI MICRO HYDEL
LOWER METTUR
LMHEP-1
LMHEP-2
LMHEP-3
LMHEP-4
PERUCHANI
AMARAVATHY
BAVANI SAGAR RBC
PUSHEP
SATHANUR DAM
PARSON VALLEY
THIRUMURTHY MINI
MUKURTHY
ALIYAR SMALL
BAVANI KATTALAI
PERIYAR VAIGAI MICRO HYDEL

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TABLE – 2 HYDRO STATION INSTALLED CAPACITY (UNITS IN MEGA WATTS wattsWATTS)))w)WATTS)

POWER STATION	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-2000	2000 - 01	2001-02	2002-03	2003-04	2004 - 05	2005-06	2006 - 07	2007 - 08	2008 - 09	2009-10	2010-11	2011-12
PYKARA	70	70	70	70	70	70	70	70	70	70	70	59	59	59	58.95	58.95	58.95	N.A	58.95	58.950
MOYAR	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	N.A	36	36
KUNDAH-1	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	N.A	60	60
KUNDAH-2	175	175	175	175	175	175	175	175	175	175	175	175	175	175	175	175	175	N.A	175	175
KUNDAH-3	180	180	180	180	180	180	180	180	180	180	180	180	180	180	180	180	180	N.A	180	180
KUNDAH-4	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	N.A	100	100
KUNDAH-5	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	N.A	40	40
METTUR DAM	40	40	40	40	40	40	40	40	40	40	40	40	40	40	47.500	50.500	50	N.A	50	50
METTUR TUNNEL	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	N.A	200	200
SARKARPATHY	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	N.A	30	30
ALIYAR	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	N.A	60	60
KADAMPARI	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	N.A	400	400
SHOLAYAR-1	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	N.A	70	70
SHOLAYAR-2	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	N.A	25	25
SURILIYAR	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	N.A	35	35
PAPANASAM	28	28	28	28	28	28	28	28	28	28	28	28	28	28	32	32	32	N.A	32	32
SERVALAR	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	N.A	20	20
KODAYAR-1	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	N.A	60	60
KODAYAR-1	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	N.A	40	40
MARAVAKANDI	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	N.A	0.75	0.8
PRIYAR	140	140	140	140	140	140	140	140	140	140	140	140	140	140	140	140	140	N.A	140	140

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VAIGAI MICRO HYDEL	6	6	6	6	6	-	-	6	6	6	6	6	-	6	6	6	6	N.A	6	6
BAVANI SAGAR MICRO HYDEL	-	-	4	4	8	-	8	-	-	8	-	-	-	-	8	8	-	N.A	8	8
POONACHI MICRO HYDEL	2	2	2	2	2	-	-	2	-	-	-	-	2	2	2	2	2	N.A	2	2
PYKARA MICRO HYDEL	2	2	2	2	2	19	2	2	2	2	2	2	2	2	2	2	2	N.A	2	2
PUNACHI MINI	-	-	-	2		1	2	2	2	2	2	-	-	-	-	-	1.30	N.A	-	-
LOWER BAVANI MICRO HYDEL	4	4	-	-	8	-	-	8	8	8	8	8	8	8	8	8	8	N.A	-	-
LOWER METTUR	120	120	120					120	120	120	120	120						N.A		
LMHEP-1	-	-	-	30	30	30	30	-	-	-	-	-	30	30	30	30	30	N.A	30	30
LMHEP-2	-	-	-	30	30	30	30	-	-	-	-	-	30	30	30	30	30	N.A	30	30
LMHEP-3	-	-	-	30	30	30	30	-	-	-	-	-	30	30	30	30	30	N.A	30	30
LMHEP-4	-	-	-	30	30	30	30	-	-	-	-	-	30	30	30	30	30	N.A	30	30
PERUCHANI															1.300	1.300	1.30	N.A	1.300	1.3
AMARAVATHY															4	4	4	N.A	4	4
BAVANI SAGAR RBC								8	8	8	8	8	8	8	8	8	8	N.A	8	8
PUSHEP													150	150	150	150	150	N.A	150	150
SATHANUR DAM								7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	N.A	705	7.5
PARSON VALLEY								30	30	30	30	30	30	30	30	30	30	N.A	30	30
THIRUMURTHY MINI								1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	N.A	1.950	2
MUKURTHY									0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	N.A	0.7	0.7
ALIYAR SMALL												2.5	2.5	2.5	2.5	2.5	2.50	N.A	2.5	2.5
BAVANI KATTALAI															30	30	30	N.A	30	30
PERIYAR VAIGAI MICRO HYDEL 1&2																		N.A	4	6.500

Source: statistical hand book of Tamilnadu

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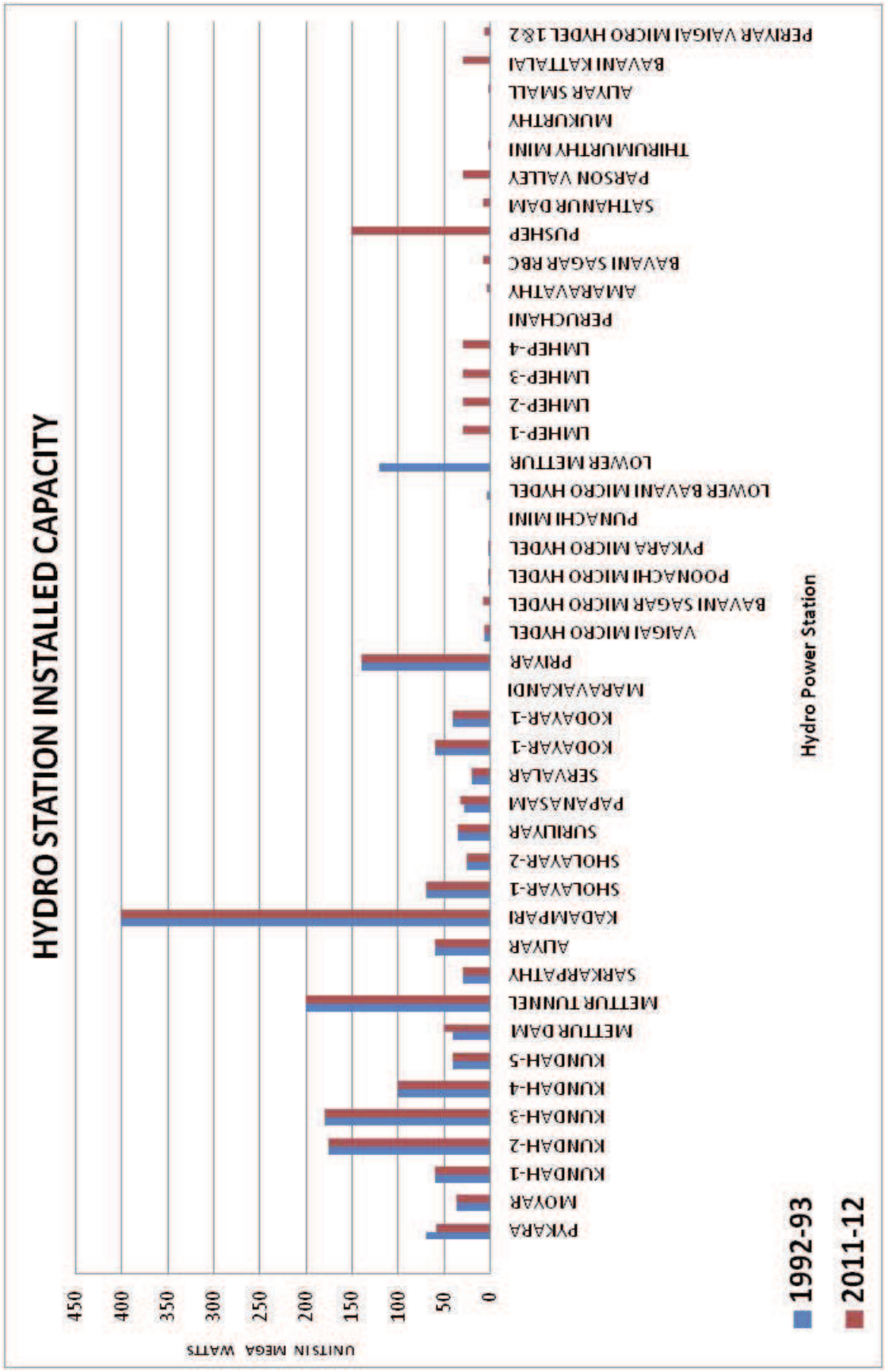
HYDRO STATION INSTALLED CAPACITY
UNITS IN MEGA WATTS
450
400
350
300
250
200
150
100
50
0
Hydro Power Station
1992-93
2011-12
PERIYAR VAIGAI MICRO HYDEL 1&2
BAVANI KATTALAI
ALIYAR SMALL
MUKURTHY
THIRUMURTHY MINI
PARSON VALLEY
SATHANUR DAM
PUSHEP
BAVANI SAGAR RBC
AMARAVATHY
PERUCHANI
LMHEP-4
LMHEP-3
LMHEP-2
LMHEP-1
LOWER METTUR
LOWER BAVANI MICRO HYDEL
PUNACHI MINI
PYKARA MICRO HYDEL
POONACHI MICRO HYDEL
BAVANI SAGAR MICRO HYDEL
VAIGAI MICRO HYDEL
PRIYAR
MARAVAKANDI
KODAYAR-1
KODAYAR-1
SERVALAR
PAPANASAM
SURULYAR
SHOLAYAR-2
SHOLAYAR-1
KADAMPARI
ALIYAR
SARKARPATHY
METTUR TUNNEL
METTUR DAM
KUNDAH-5
KUNDAH-4
KUNDAH-3
KUNDAH-2
KUNDAH-1
MOYAR
PYKARA

Servalar, marvakandi, vaigai micro hydel, bavanisagar micro hydel, poonachi micro hydel, pykara micro hydel, punachi mini, lower bavani micro hydel generates less units of power i.e below 30 MU and even in between some years there is no generation of powers. Servalar, vaigai micro hydel, lower bavani micro hydel shows an increase in the power generation during recent years i.e 2011-12.

From the above table we can see that kundah-2,mettur tunnel ,periyar and lower mettur has generated more units of power during 1992-93 but recently the generation of these station has declined where as kadampari has generated less units during 1992-93 but during recent period its generation has been increased compared to other stations.

Table: 2 Hydro Station Installed Capacity

Installed capacity of various hydro power station are shown in the below table from the year 1992-93 to 2011-12.

From table.2 we see that the installed capacity i.egenerating capacity of kadampari is 400MW which is the maximum among the various power plants and it is followed by mettur tunnel having 200MW of installed capacity, kundah-3 180MW ,kundah-2 175MW , periyar 140 MW and lower mettur was divided into 4 units L.M.H.E.P -1 with 30 MW, L.M.H.P-2 with 30 MW, L.M.H.E.P-3 with 30 MW , L.M.H.E.P-4 with 30 MW and from 1999-2000 all of the units were combined into single unit , again from the year 2004-2005 it was divided into 4 units having 30 MW of installed capacity each.

During 1992-93 the installed capacity ofpykara& sholayar-1 was 70 MW and from the year 2003-04 the installed capacity of pykara was reduced to 59MW upto the recent year 2011-12. The installed capacity of Aliyar , kundah-1 and kodayar -1 was 60 MW and it remained same during the study period ,thus there is no change in the installed capacity. The installed capacity of moyar was 36MW, kundah-5 40MW , mettur dam 40 MW ,sarkarpathy 30MW ,sholayar-2 25MW,suriliyar-35MW,papanasam28MW, servalar20MW, KODAYAR-1 40mw, the installed capacity of these power station ranges from20MW TO 50MW.peruchani, amaravathy and Bavanikattalai was commenced from the year 2006-2007 with 1.300MW,4MW and 30 MW.

The following power stations is having low installed capacity which was commenced from the year 1999-2000 , Bavanisagar RBC with 8MW of installed capacity, sathanur dam with 7.5MW , thirumrthy mini with 1.95 MW . Mukurthy with 0.7MW of installed capacity &Aliyar small with 2.5MW was commenced after 2004-2005.Periyarvaigai micro hydel power station was commenced recently during the year 2010-11 with 4MW of installed capacity and the capacity was increased to 6.500MW during the 2011-12.

The installed capacity of papanasam was 28MW & it was increased from the year 2006-2007 to 32 MW. Maravakandi has 0.7 MW of installed capacity and it was increased to 0.8MW during 2011-12.Bavani sagar micro & lower bavani was having 4MW of installed capacity and from the year 1996-97 it was increased to 8 MW and in between years power plant was not in operation.Pykara micro hydel & poonachi micro hydel has 2 MW of installed capacity and there is no change in installed capacity during the study period.

Findings:

1. The analysis of hydro power generation by various power station reveals that during 1992-93 the power plants were generating more units of power but recently during 2011-12 the generation has been decreased due to unfavourable natural factors and low installed capacity.
2. Kadampari power station has high installed capacity i.e 400 MW during 1992-93 but its generation was only 6.350MU due to less rainfall but in recent study period i.e 2011-12, the generation has increased to 510.537 MU due to sufficient availability of water . The maximum and minimum generation of power mainly depends upon the favourable monsoon condition.
3. If the capacity is utilised efficiently there may be possibilities of increasing the power generation. Kundah-2 power station has 175 MW of installed capacity and its power generation is 843.465MU during 1992-93, the capacity has been efficiently utilised. Whereas kundah-3 has more installed capacity than kundah-2 but its power generation is low compared to kundah-2. So if the capacity is efficiently utilised the generation may increase.
4. The power plant which has high installed capacity is generating more units of power compared to the plant which has low installed capacity. For example mettur tunnel has 200 MW of installed capacity and its generation is 675.585MU of power and mukurthy has 0.7MW installed capacity and its generation is 0.736MU of power.
5. On account of irregular monsoon in the catchment areas all the dams go dry in the summer season so making further development of the waters for generation of power will be difficult if at all the generating capacity is high.

Conclusion: Based on the above analysis it is studied that there are nearly 43 hydro power stations which generates hydroelectricity in Tamil Nadu, all these plants are mainly depended on monsoon which is unpredictable. Already a number of power station has been commenced after 2000-2001 and recently periyar vaigai micro hydel has also been commenced during 2010-2011 with low installed capacity so instead of starting new power stations it is better to

increase the installed capacity i.e generating capacity of existing power plants and if the capacity is efficiently utilised it will lead to increase in the power generation.

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Associate Professor, Supervisor and Guide,P.G & Research Department of Economics,
A.M. Jain College, Meenambakkam Chennai-114
Research Scholar, P.G & Research Department of Economics,
A.M.Jain College, Meenambakkam, Chennai-114