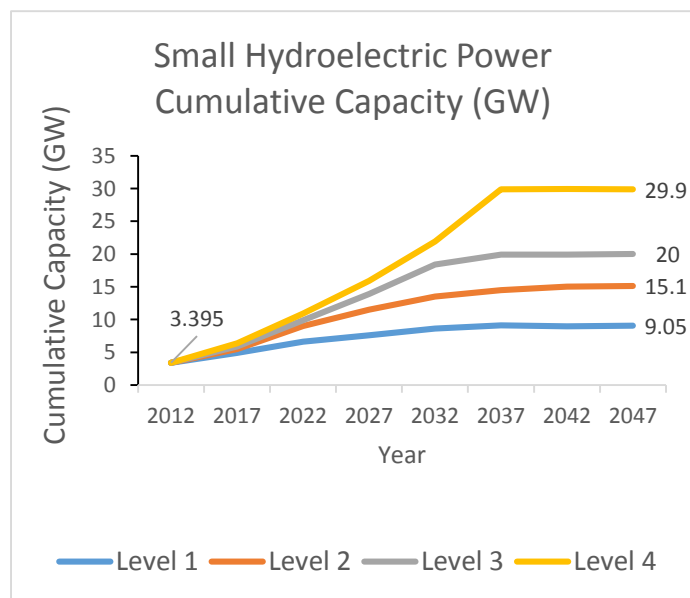


SMALL HYDRO POWER

With a capacity of 4055 MW of Small Hydro Power installed in the country as of 31st May 2015, it constitutes nearly 11% of installed RE capacity. Presently the capacity stands at 4055 MW (31st May 2015). So far, 898 SHP projects with an aggregate capacity of 3411 MW have been set up and 348 projects aggregating to 1309 MW are under implementation. While SHP is already cost competitive with conventional power, increased efficiencies and capacity utilization factors would make it even more viable in the future. In order to further enhance the total power generation from SHP's it is essential to harness all potential sites. According to the MNRE, the focus of the SHP programme is to lower the cost of equipment, increase its reliability and set up projects in areas which give the maximum advantage in terms of capacity utilisation.



LEVEL 1

Level 1 assumes that although SHP is a low cost RE resource, capacity addition is lower than expected in the 12/13th plan periods reaching only 6.5 GW by 2022. It further increases to 7.5 GW by 2027 and plateaus at 9 GW from about 2032-2047. Essentially capacity addition is very slow and only takes care of retirement to maintain the roughly committed capacity upto the 13th plan. Environmental and social concerns over the development of SHP limits capacity addition. The corresponding electricity generated in 2047 would be 3.7 TWh in comparison with 0.7 TWh in 2012.

LEVEL 2

Level 2 assumes that the 12th five-year plan target of 2.1 GW of new capacity is met by 2017 and a further 3.5 GW is added in the 13th plan to reach a cumulative capacity of 8.9 GW by 2022. Capacity addition slows down after this point and reaches the ultimate capacity of 15 GW 2047 and the amount of electricity generated would be 16 TWh.

LEVEL 4

Level 4 assumes the resource potential is significantly augmented and that capacity deployment increases rapidly. It reaches 10.8 GW in 2022, in line with NAPCC expectations and further increases to 29.9 GW by 2047. Both these efforts and enhanced capacity utilization lead to a quick increase in overall SHP generation resulting in 115 TWh by 2047.

LEVEL 3

Level 3 assumes an optimistic view by meeting not only the 12th and 13th Plan targets but a slightly faster deployment resulting in 9.8 GW in 2022. By 2032, the complete present projected potential of roughly 20 GW is met and maintained thereafter till 2047. Resulting generation is approximately 77 TWh.