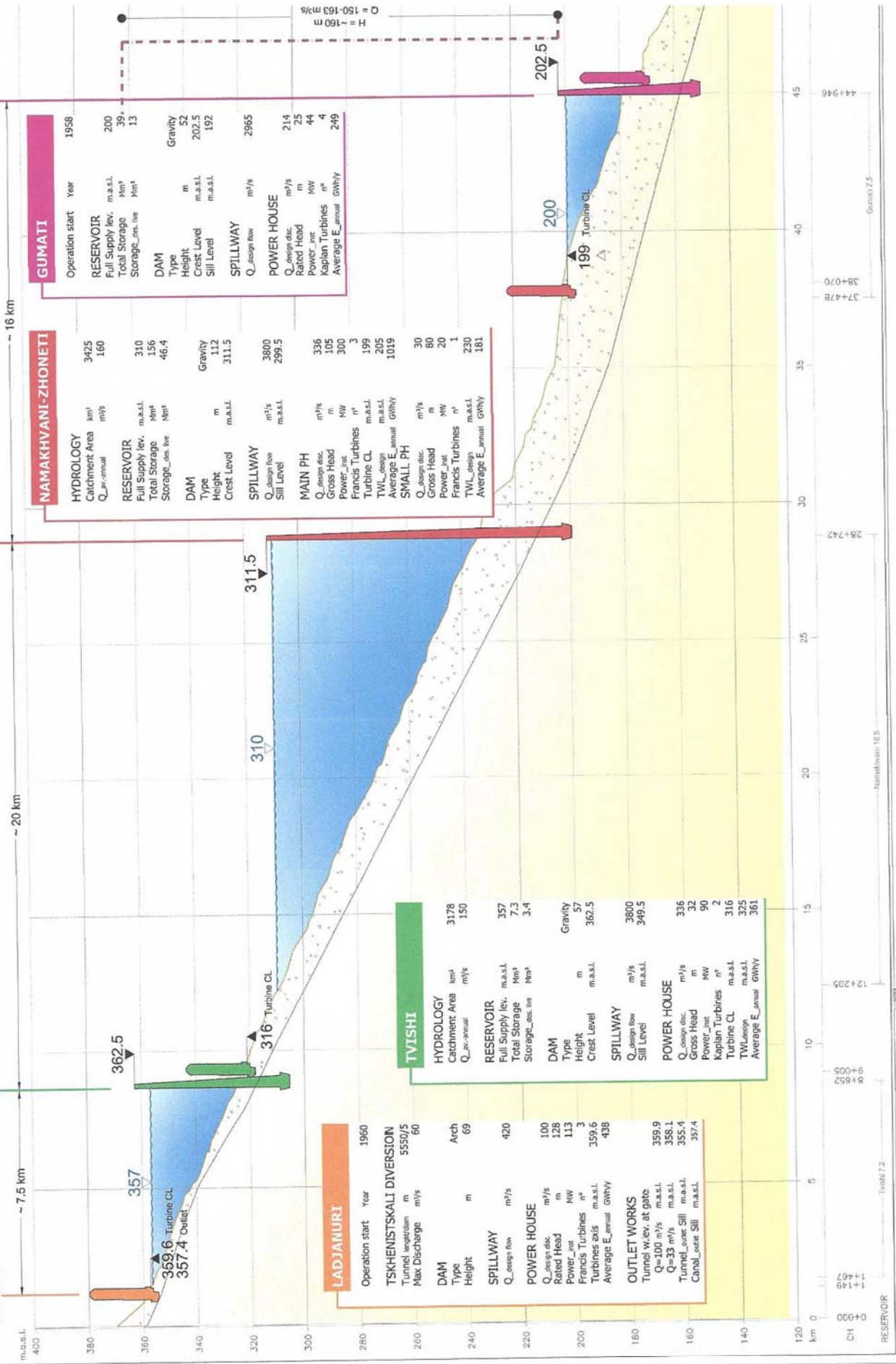


**LUDJANURI**  
438 Gwh/y  
113 MW

**TVISHI**  
361 Gwh/y  
90 MW

**NAMAKHVANI**  
1200 Gwh/y  
320 MW

**GUMATI**  
249 Gwh/y  
44 MW



**LADJANURI**

Operation start	Year	1960
TSKHENISTKALI DIVERSION	Tunnel length/can	5530/5
	Max Discharge	m <sup>3</sup> /s 60
DAM	Type	Arch
	Height	m 69
SPILLWAY	Q <sub>design flow</sub>	m <sup>3</sup> /s 420
POWER HOUSE	Q <sub>design disc.</sub>	m <sup>3</sup> /s 100
	Rated Head	m 128
	Power <sub>inst</sub>	MW 113
	Francis Turbines	n° 3
	Turbines axis	m.a.s.l. 359.6
	Average E <sub>annual</sub>	GWh/y 438
OUTLET WORKS	Tunnel w.lev. at gate	359.9
	Q=100 m <sup>3</sup> /s	m.a.s.l. 358.1
	Q=33 m <sup>3</sup> /s	m.a.s.l. 355.4
	Tunnel <sub>outlet</sub> Sill	m.a.s.l. 357.4
	Canal <sub>outlet</sub> Sill	m.a.s.l. 357.4

**TVISHI**

HYDROLOGY	Catchment Area	km <sup>2</sup> 3178
	Q <sub>av-annual</sub>	m <sup>3</sup> /s 150
RESERVOIR	Full Supply lev.	m.a.s.l. 357
	Total Storage	Mm <sup>3</sup> 7.3
	Storage <sub>des.lev</sub>	Mm <sup>3</sup> 3.4
DAM	Type	Gravity
	Height	m 57
	Crest Level	m.a.s.l. 362.5
SPILLWAY	Q <sub>design flow</sub>	m <sup>3</sup> /s 3800
	Sill Level	m.a.s.l. 349.5
POWER HOUSE	Q <sub>design disc.</sub>	m <sup>3</sup> /s 336
	Gross Head	m 32
	Power <sub>inst</sub>	MW 90
	Kaplan Turbines	n° 2
	Turbine CL	m.a.s.l. 316
	TWLeision	m.a.s.l. 325
	Average E <sub>annual</sub>	GWh/y 361

**NAMAKHVANI-ZHONETI**

HYDROLOGY	Catchment Area	km <sup>2</sup> 3425
	Q <sub>av-annual</sub>	m <sup>3</sup> /s 160
RESERVOIR	Full Supply lev.	m.a.s.l. 310
	Total Storage	Mm <sup>3</sup> 156
	Storage <sub>des.lev</sub>	Mm <sup>3</sup> 46.4
DAM	Type	Gravity
	Height	m 112
	Crest Level	m.a.s.l. 311.5
SPILLWAY	Q <sub>design flow</sub>	m <sup>3</sup> /s 3800
	Sill Level	m.a.s.l. 299.5
MAIN PH	Q <sub>design disc.</sub>	m <sup>3</sup> /s 336
	Gross Head	m 105
	Power <sub>inst</sub>	MW 300
	Francis Turbines	n° 3
	Turbine CL	m.a.s.l. 199
	TWL <sub>design</sub>	m.a.s.l. 205
	Average E <sub>annual</sub>	GWh/y 1019
SMALL PH	Q <sub>design disc.</sub>	m <sup>3</sup> /s 30
	Gross Head	m 80
	Power <sub>inst</sub>	MW 20
	Francis Turbines	n° 1
	TWL <sub>design</sub>	m.a.s.l. 230
	Average E <sub>annual</sub>	GWh/y 181

**GUMATI**

Operation start	Year	1958
RESERVOIR	Full Supply lev.	m.a.s.l. 200
	Total Storage	Mm <sup>3</sup> 39
	Storage <sub>des.lev</sub>	Mm <sup>3</sup> 13
DAM	Type	Gravity
	Height	m 52
	Crest Level	m.a.s.l. 202.5
	Sill Level	m.a.s.l. 192
SPILLWAY	Q <sub>design flow</sub>	m <sup>3</sup> /s 2965
POWER HOUSE	Q <sub>design disc.</sub>	m <sup>3</sup> /s 214
	Rated Head	m 75
	Power <sub>inst</sub>	MW 44
	Kaplan Turbines	n° 4
	Average E <sub>annual</sub>	GWh/y 249



