

## Krishna (Almatti) - Pennar link project

### SALIENT FEATURES

<b>1.</b>	<b>Name of the Project</b>	Krishna (Almatti) - Pennar Link Project	
<b>2.</b>	<b>Purpose</b>	Diversion of 1980 Mm <sup>3</sup> of water from Almatti reservoir to meet the irrigation requirements of enroute basins	
<b>3.</b>	<b>Head Works</b>	<b>Almatti (Existing)</b>	<b>Kalvapalli (Proposed)</b>
i)	State	Karnataka	Andhra Pradesh
ii)	District	Bijapur	Anantapur
iii)	River	Krishna	Pennar
iv)	Catchment area (sq. km)	35925	5616
v)	FRL (m)	519.60	475.00
vi)	Dead storage level/MDDL (m)	504.744	466.00
vii)	Gross storage capacity at FRL (Mm <sup>3</sup> )	3439.70	83.00
viii)	Live storage capacity at FRL (Mm <sup>3</sup> )	3104.70	73.00
ix)	Reservoir submergence area (Km <sup>2</sup> )	487.87	13.23
<b>4.</b>	<b>Main features of the link canal</b>		
i)	Length of the canal (km)	587.175	
ii)	FSL at off take (m)	510.00	
iii)	Bed slope of the canal		
	a) Almatti to Kalvapalli	1 in 20000	
	b) Kalvapalli to Bukkapatnam	1 in 12000	
	c) Beyond Bukkapatnam	1 in 15000	
iv)	Full supply depth at the off take (m)	5.25	
v)	Bed width at off take (m)	32	
vi)	Maximum carrying capacity of link canal at off take (cumec)	230	
vii)	Total No. of CD works		
	a) Aqueducts	21	
	b) Syphon Aqueducts	9	
	c) Canal Syphons	39	
	d) Super passages	30	

	e) Under Tunnels	31
viii)	Total No. of cross masonry works	97 Nos.
ix)	Total No. of tunnels	5 Nos.
<b>5.</b>	<b>Annual Irrigation and Utilisation</b>	
i)	Annual Irrigation (ha)	
	a) Middle Krishna sub basin	16334
	b) Tungabhadra sub basin	46224
	c) Vedavathi sub basin	83741
	d) Upper Pennar sub basin	112035
	Total	<b>258334</b>
ii)	Utilisation (Mm <sup>3</sup> )	
	a) Irrigation	
	Middle Krishna sub basin	85
	Tungabhadra sub basin	253
	Vedavathi sub basin	505
	Upper Pennar sub basin	871
	Sub-total	1714
	b) Domestic and industrial Utilisation	56
	c) Transmission losses	210
	Total	<b>1980</b>
iii)	District in which command area lies	
	Karnataka	Raichur & Bellary
	Andhra Pradesh	Anantapur district
<b>6.</b>	<b>Power Generation</b>	Link canal power house at the off take with an installed capacity of 3 x 4.5 MW (13.5 MW)
<b>7.</b>	<b>Estimated cost of the project</b>	Rs.6600 crore
	Cost per hectare of irrigated area	Rs.2.55 lakh
	Cost per Mm <sup>3</sup> of water delivered (At the Canal head/out let)	Rs.333.30 lakh
<b>8.</b>	<b>B.C ratio</b>	1.20
<b>9.</b>	<b>Internal Rate of Return</b>	
	a) With distributional and employment effect	14.26 %
	b) Without distributional and employment effect	9.51 %