PROJECT REPORT

Full Title of The Project	:	Extension of Kolana Air Strip Jhalawar
File No.	:	FP/RJ/Others/21735/2016
Date of Proposal	:	07.10.2016

SANCTIONED COST : 169.11 CRORE





VIEW OF KOLANA AIR STRIP

PUBLIC WORKS DEPARTMENT JHALAWAR

INTRODUCTION

Jhalawar town is situated in the south east of Rajasthan State. It is a border district and is surrounded by Kota and Baran district of Rajasthan in northwest and border of Madhya Pradesh state in rest of the periphery. The latitude and longitude of the district varies from 24⁰45'20" N to 24⁰52'17" N and 75⁰27'35"E to 76⁰56'48: E respectively.

Kolana air strip is situated 4 Km away from Jhalawar towards Jhalawar Baran Road. At present 1700 mtr x 30 mtr runway and VIP Lounge is existed which is feasible for 9 sitter air craft only. This air strip is constructed in the year 2005. The existing area of airstrip is 49.99 Hectare having 1700 mtr runway with 30 mtr width and VIP Lounge.

Jhalawar is a central place of Hadoti region in Rajasthan and is an important & histirical town having various industries related to thermal power generation, stone & cement. This region has huge potential for development to become hub for another industrial central besides the tourist related services. Several Important Infrastructure projects are in pipeline in the rigion and are due to commence in near future. Availability of plenty of natural mineral resources, productive soil & natural perennial stream of water in the region makes it a unique area having vital potential to developat even faster rate in the years to come. Jhalawar Kota region is well connected to road network & recently the district head quarter of Jhalawar has benn connected with Rail link. Avalability of Multi Modal Transportation facility in the region will further improve connectivity & will help in boosting the tourism in Hadoti Tourism circuit and will have far-reaching positive impact on economic & social development of the region.

The need of air connec tivity of Jhalawar Kota region was felt for last many years and keeping the same in view the state Government constructed an air strip at jhalawar in year 2004-05, but due to its limited runway size & non availability of allied facilities required for commercial operations the same is being used for administrative flight operations only at present.

Jhalawar Kota region has got no operational airport in vicinity. Jhalawar is 233 Km from Devi Ahilyabai International air port Indore, 254 Km from Raja Bhoj airport Bhopal322 Km Jaipur International airport, 333 km from Maharana Pratap airportUdaipur, 364 Km from Gwalior Airport. This has been viewed as a barrier to repaid economic growth and social development in the region.

Inspired by the vision contemplated in upcoming **National Civil Aviation Policy** 2015 which gives emphasis on the mass air connectivity by way of several incentives for domestic flight operations and in order to provide much needed regional connectivity in the state at

large, the government of Rajasthan has envisaged to upgrade the existing airstrip at Jhalawar for commencing commercial operations.

In order to oprate commercial flights from an airport, The DGCA's licensing requirement are to be fulfilled which mandates to develop the aerorome and allied facilities to the standards set forth by them. The standards regarding Aerodrome Design & Operations have been issued by the DGCA under **Civil Aviation Requirements (CAR)**.

ADMINSTRATIVE AND FINANCIAL SANCTION

A meeting for extension of existing airstrip has been taken by the Principle secretary Civil aviation and director civil aviation on dated 28.1.2016 and decided to upgrade the existing airstrip upto the length of 3000 mtr and width of 60 mtr for operation of airbus A320/Q400 as per DGCA Guidelines and technically suitable proposal required as decided in the meeting is prepared by PWD accordingly. The standard regarding aerodrome Design and Operations have been issued by the DGCA under civil Aviation Requirement Section-4, Aerodrome Standards & Traffic Services series B, Part I effective forthwith 31 July 2006 are to be referred. This also lay down requirement for aerodromes infrastructure including taxiways, aprons, marking, aeronautical lighting, emergency services maintenance standards in India. The air strip length and width was decided by the director civil aviation Jaipur.

Development of the existing airstrip to the applicable standards is necessitated for obtaining the licences from DGCA to operate scheduled Commercial Flights in light of various notification issued by the MoCA, GOI. The latest notification No. SO 2457(E) dated 21st August 2015 issued by the ministry of Civil Aviation Government of India directs that no person shall operate scheduled air transport services to/for an aerodrome including Defence aerodromes with effect from 31st December 2015 unless it has been licensed by the Director General of Civil Aviation.

As per the direction of Principal Secretary civil aviation the Forecaste Estimate with drawing for extension of existing airstrip is submitted through Distt. Collector Jhalawar prior approval from director civil aviation amounting to Rs. 169.11 crore for Administrative and Financial sanction.

The Forecaste estimate consists following proposals

- 1. Extension and widening of airstrip upto 3000x60 mtr amounting to Rs. 54.00 crore
- 2. Construction of boundary wall amounting to Rs. 11.00 crore
- 3. Construction of terminal station apron amounting to Rs. 21.60 crore
- 4. Shifting of Megha Highway (Baran Jhalawar Road) Rs. 21.60 crore
- 5. Shifting of Police station Mandawar building Rs. 5.40 crore
- Provision of Drainage of airstrip, electric facility, water harvesting ATC tower etc Rs. 21.73 crore

- 7. Land acquisition Rs. 11.87 crore
- 8. Shifting of HT Tower Rs. 16.91 crore
- 9. Shifting of GSS and electric lines Rs. 5.00 crore

On the basis of forecaste estimate after duly scrutinised the Administrative and Financial sanction for this project is issued by the Civil Aviation department vide No. F7(16)CA/1996 Part dated 16.02.2017 amounting to Rs. 169.11 crore. The working agency is appointed as Public works department and DDO to the district collector Jhalawar.

NECESSITY

Jhalawar is developing as a industrial town currently.Kalisindh thermal power project of 2 units of 600 MW is existed at Jhalawar. Cotton industry of Pitti Grops of industries is also existed at Jhalawar. A maintenance of air craft unit is also started shortly where all types of air craft comes from all over the India for repair and maintenance. Rajasthan Textile miles Bhawanimandi is also running nearby this airport. Jhalawar is a tourist town having Gagron fort, Kolvi caves, Sun temple at Jhalarapatan and Chandkheri Jain temple at Khanpur. Mukandara tiger hiles is also developed shortly as a national park and tiger is also shifted here and developing ecotourism. Due to which tourist centre at Jhalawar developing. In Jhalawar all higher education centre such as Medical college, Engineering college, Horticulture college etc. are existed.

Jhalawar is 85Km from Kota city which is industrial and education city of the India and four lane road is in progress for connectivity therefore only one hour to reach Jhalawar airport from Kota.

Due to which industrial, tourist, education facility in Jhalawar air traffic is developed and commercial flight is required to connect all the major cities of India. Therefore The existing air strip is required to extend from 1700 mtr to 3000 mtr and width upto 60 mtr is proposed for operation of commercial flight as per DGCA Guidelines. The terminal station, Taxiway, Apron, Hanger, etc. is required for starting of commercial flight. The design and drawing of the airstrip, taxiway, apron, hanger, terminal station is as per ICAO standard and DGCA guidelines. The extension of air strip is as per technical requirement for air port.

Taxiway is parallel runway where aircraft enter after landing and apron is the parking stand of aircraft and hanger is a shade for parking of aircraft for long period and terminal station is the area where pessengers security check, leggage ramp area, waiting area for passengers etc.

The extension of existing airstrip is technically suitable towards right side which is surrounded by forest area as per civil aviation expert. Therefore shifting of Megha highway from Jhalawar to Baran is also required to be shift and Police thana, GSS of JVVNL is also required to be shift.

LAND DETAILS

The existing land of airstrip is 49.99 hect. Having 1700 mtr runway and VIP Lounge. Now the length of the airstrip to be extended upto 3000 mtr with other facilities of airport such as taxiway, apron, hanger, terminal station etc. The total land required for this project is 219.53 hect. Out of which 120.4062 hectare land is of forest land. The area details is as under.

Type of Land	For Airstrip	Foe Diverted Megha	Total
	Extension	Highway	
Private Land	12.5329 Hect.	5.0821 Hect.	17.6160 Hect.
Govt. Land	59.6363	4.4801	64.1164
Forest Land to be	118.2184	2.1878	120.4062
diverted			
Total	190.3886 Hect.	11.75 Hect.	202.1386 Hect.

For extension of existing air strip 120.4062 hectare forest land is required and proposed under this diversion proposals. The main component of the proposal is air strip extension, taxiway apron, terminal station, megha highway and safety zone for which area calculation sheet is enclosed

Component	Total Land Details	Forest Land Details	Non Forest Remarks Land
Extension of air strip	3209x60 = 19.23 Hec	1x430x11.85 = 0.51 1x906x60 = 5.44	11.61 Hect
Taxiway Apron	4x120x30 = 1.44 Hect 2x78x30 = 0.47 1x2665x45 = 11.99 1x500x100 = 5.00 Total = 18.90 Hect.	$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	9.64 Hect.
Tarminal Station Megha	1x500x100 = 5.00 1x766x179 = 13.71 1x500x62 = 3.10 Total = 21.81 Hect. 1x3916x30 = 11.75 Hect.	1x500x100= 5.001x766x179= 13.711x500x62= 3.10Total= 21.81 Hect.1x729x30= 2.187 Hect	- 9.56 Hect.
Highway Safety Zone	1x3693x125 = 46.1625 3693x228.17 = 84.2861	1x450x438 = 19.71	50.9086 Hect.

	Total	=130.4486	1x904x105	5.5	= 9.54	L I	
			1x1000x34	42	= 34.20)	
			1x220x582	2	= 12.80)	
			Total	= 79.5	2 Hect.		
Total Area	202.1386 He	ect.	120.4062 Hect.		81.7324 Hect.		

Khasara details is also enclosed in the attached sheet.

S.No.	Khasara No	Total Area in	Diverted area in	Village
		Hect.	hect.	
Extension of air				
strip(Forest Land)	210	40 526	40.2724	Kolana
1	218	19.526	19.2731	Kolana
2	226	3.1869	2.6557	
3	367	6.2979	4.4642	
4	369	10.0286	0.0632	
5	370	8.9410	5.7414	
6	229	2.8075	1.4038	
7	3	1.7705	0.2908	Kherkhera
8	4	0.5691	0.1770	
9	5	9.6113	0.7588	
10	6	0.6576	0.3161	
11	54	0.2276	0.0506	
12	55	10.5092	4.1607	Kherasi
13	32	0.2529	0.2529	
14	34	13.7466	13.7466	
15	36	0.8979	0.8979	
16	38	9.2951	6.8797	
17	40	12.3808	10.9012	Bhanwariya
18	1	0.3162	0.3162	
19	10	2.8454	2.8454	
20	11	0.2909	0.2909	
21	12	22.5865	10.3448	
22	214	6.6267	5.4506	
23 215/377		0.8220	0.2909	
24	216	2.5040	0.2276	
25	83/379	0.0885	0.0253	
26	603	5.4380	4.0595	Mandawar
27			4.6412	
28	842	5.4885 13.9110	13.9110	

29	844	4.1227	3.7813	
		Total for air	118.2184	
		strip		
Diverted Megha				
Highway				
1	229	2.8075	0.4800	Kolana
2	331	18.6587	0.9238	
3	332	19.7972	0.7840	
		Total for megha	2.1878 Hect.	
		highway		
		Total Forest	120.4062 Hect.	
		area		

Previously 9.71 Hect. Diversion proposal has been submitted to the nodal agency vide proposal no. F1(56)FP/2004/20.10.2004 and Pricipally sanctioned by MOEF No. BB/RAJ/09/18/2004/FC on dated 3.3.2005. DFO Jhalawar has issued a demand notice vide his letter no. 3988 dt. 08.04.2005 amounting to Rs. 6662682 (N.P.V. Rs. 6182037 and CA Rs. 480645). This office has deposited the total amount vide this office letter no. 1736 dt. 24.08.2005 cheque no. 700907 dt. 18.08.2005. After this forest department has submitted the difference demand notice vide his letter no. 12419 dt. 24.09.2005 amounting to Rs. 2751163/- but due to non availability of fund the difference amount is not deposited. Now this area in included in new proposal of extension of Kolana air strip.

Against this diversion proposal 120.4062 hect. Non forest land is at Harnawada village in Gangdhar Tehsil of this district is transferred to the forest department the allotment letter from The Dist. Collector Jhalawar vide No. 776 dated 9.917 and 788 dated 9.3.17 and Handed over of land to the forest department on dated 16.05.2017 copy of which attached.

COST BENEFIT RATIO

After airport project is completed at Jhalawar, industries shall be developed and tourist traffic is also developed. Therefore hotel industry is also developed.

The cost benefit calculation is done for this project. The total cost of the project included NPV @ 6.25 Lacs per hect., Substitute plantation cost to be disposed @ 0.34244 per hect., Environmental loss cost to be disposed @1.29 Lacs/hect. Maintenance cost @ 200 Lacs per year for 50 year is included. Therefore 278.60 crore is the total cost of the project.

Benefits of the project is also calculated including saving in industrial product, hotel industries, catering amounting to Rs. 130 crore. This included saving in industrial product 1.00 crore per year, Hotel industry 1.50 crore per year for 50 years and catering 10 lacs per year total 5.00 crore.

Direct employment of labour during construction period three year 500 labour per day and operation period for 50 years 1000 labour per day amounting to Rs, 260.40 crore.

Economoc benefits due to sell of industrial product 16.00 crore per year tourism development 8.00 crore per day and saving in road transport 3.00 crore per year for 50 years operation period accessed to Rs. 1350 crore.

Therefore benefit/cost ratio comes to 6.35. Calculation sheet is attached in annexure VIA.

Loss of value of timber, fuel wood is assessed to Rs. 12.00 lacs and no Loss of animal husbandry and human resettlement. Loss of public facilities and administrative infrastructure is 39.91 crore.