

EXPRESSION OF INTEREST

Expression of interest is invited for financial proposal in sealed envelop for conducting concurrent Evaluation study of Bhakra Canal Command Ph-II Project from the reputed/accredited consultants having experience in conduction of minimum one such evaluation study. The proposal must reach in the office of Executive Engineer ME&QC Command Area Development Authority Bay, 39-40 Sector- 4 Panchkula Haryana by 10.10.2011 at 2.00 pm. The same will be opened at 3.00 pm on 10.10.2011 in the office of Executive Engineer ME&QC CADA Panchkula. Project details and TOR for the purpose are available at CADA Website on www.cadaharyana.nic.in and may also be obtained from the office of Xen (ME&Q.C.) CADA, Panchkula.

Sd-
Administrator
CADA Haryana Panchkula
Email hrcada-chd@nic.in

EXPRESSION OF INTEREST FOR INVITING SEALED FINANCIAL PROPOSAL FOR CONDUCTION OF CONCURRENT EVALUATION STUDY OF BHAKRA CANAL COMMAND PH-II PROJECT OF CADA HARYANA.

Expression of Interest is invited for sealed financial proposal for conducting concurrent Evaluation Study of ongoing Bhakra Canal Command Ph-II Project from the consultants/Agencies. Terms of Reference and other parameters like Scope of Study, Methodology, Appraisal of CAD Project Profile, Evaluation Indices, Impact of CAD activities, Identification of Constraints, Data Processing, Analysis and Interpretation, Recommendation, Duration of Study and Submission of Reports are described below:-

1.) Eligibility Criteria:-

- a) The Consultant/Agency should have conducted at least one Impact/ Concurrent Evaluation Study or Third Party Monitoring & Evaluation of Command Area Development and Water Management (CADWM) / Irrigated - Agricultural Projects at State/ National level.
- b) The Consultant/Agency should produce a certificate from the Head of the organization who awarded the study relating to successful completion of the study.
- c) The Consultant/Agency should also produce a list of regular and casual experts along with their brief bio-data.
- d) The Consultant/Agency should also produce his/their profile having details of permanent infrastructure etc.

2.) Scope of Study/Work:-

The scope of work shall include analysis of all items as specified in the noted below Terms of Reference giving due stress to the items of special relevance to the CADWM project to be taken up for study. The Concurrent Evaluation analysis shall be carried out for the following items:

2.1 OFD Works

On-farm development works i.e. field channels, field drains, land leveling and shaping, reclamation of waterlogged areas and other CAD activities. Their adequacy/ inadequacy shall be highlighted.

2.2 Present Status Vis-à-vis Planning and design

Critical Evaluation of the following items shall be made by making comparisons of the existing and the designed ones:

- i) Losses in distribution system below the outlet.
- ii) Field application losses pre and post lining stage.
- iii) Cropping pattern pre and post lining stage.

2.3 Agro-Climatic Parameters

It shall include:

- i) Rainfall
- ii) Temperature
- iii) Soils and land topography.

2.4 Socio-Economic Parameters

- i) Size of land holdings
- ii) Economic status
- iii) Literacy

2.5 Organizational Review

- i) Review of organization structure of CADA
- a) Extent of co-ordination at various levels between relevant departments in providing services to the farmers.
- b) Budgetary support – adequacy/inadequacy etc.

2.6 Concurrent Evaluation of CAD Programme

- i) Irrigation Potential and Increase/Decrease of Irrigated Area.
- a) Irrigation potential created and utilized vis- à - vis year wise and crop wise irrigation in the saturated area of command and its comparison with pre lining stage.
- b) Reasons for under utilization of irrigation potential, if any.
- ii) Water use Efficiency
- a) Water use efficiency at outlet commands.
- iii) Status of conjunctive use of surface and ground Water.
- a) Available ground water
- b) Present status of use
- c) Scope for future expansion.
- d) Action taken by the project authorities or line department to promote conjunctive use.
- e) Extent of use of sprinkler and drip irrigation systems.
- iv) Change in cropping patterns
- a) Increase/decrease in Irrigated area, giving reasons thereof.

- b) Efforts made by CAD Authority to introduce efficient water use crops, giving details.
- v) Agricultural Performance
 - a) Use of high yielding varieties
 - b) Use of fertilizers
 - c) Use of other inputs.
 - d) Credit facilities
 - e) Extension services.
 - f) Production/productivity of crops season wise.
- vi) Environmental Impact
 - a) Fluctuation of ground water table after irrigation.
 - b) Pre-and post monsoon status of ground water
 - c) Area affected by water logging/salinity/alkalinity
- vii) Socio-Economic Impact

It shall be examined in terms of improvement in income generation, employment and quality of life of farmers of command area.

- viii) Identification of Constraints.

Constraints in programme implementation and realization of set objectives shall be identified.

- ix) Recommendations

Following study and critical analysis of data, recommendations shall be given on various items among which the important ones include:

- a) Improvement in farm development works.
- b) Judicious use of surface and ground water.
- c) Modification in cropping pattern.
- d) Enhancement of agricultural productivity on sustainable basis.
- e) Organizational improvement.
- f) Preventive and remedial measures against adverse environment impact.
- g) Preventive and remedial measures against water logging in the command area.
- h) Induction of participatory Irrigation Management.

3. Methodology:-

The various tasks shall be accomplished by undertaking the required activities adopting appropriate methodology. The methodology procedure shall be as presented below:-

- I) Collection of Secondary data.
- II) Collection of Primary data.

- III) Selection of distributaries/outlets.
- IV) Village and farmers response survey.

4. Appraisal of CADWM Project Profile.

- I) Review of Progress achieved under various CADWM activities.
- II) Review of Performance in terms of application of water at the field level.
- III) Review of water use efficiency with respect to formation of WUA and their active role in O&M of the project including implementation of warabandi.
- V) Appraisal of Bio Physical characterization of the command area.
- VI) Organizational review.

5. Evaluation indices.

Impact of a project shall be assessed in terms of its contribution to project objectives, advantage and disadvantages associated with their implementation, operation and maintenance.

6. Irrigation Potential.

The year wise comparison of projected and actual irrigated area shall be made to know the gap in utilization of the created potential and the reasons for the same shall be assessed.

7. Impact of CAD activities

Impact of construction of field channels and other approved CADWM activities on potential utilization shall be assessed and work out.

8. Identification of constraints.

The constraints shall be identified in respect of implementation of CADWM activities in the project area.

9. Data processing, Analysis and Interpretation.

The data collected from secondary and primary sources shall be appropriately processed and analysis shall be carried out to obtain the required outputs for the study.

10. Recommendation

Recommendation shall be developed for redressal of various deficiencies/constraints with the purpose of bringing up desired level of improvement in the implementation of CADWM programme.

11. Duration of Study

The Study of concurrent evaluation shall be completed within twelve month time periods after signing of agreement.

12. Submission of Reports.

- i) Inception Report (2 copies) shall be submitted within 2 months from the date of award of study and signing of agreement.
- ii) Draft Final Report (2 copies) shall be submitted within 11 months.
- iii) Final Report (5 no. copies) shall be submitted within 12 months.

Sd-

Administrator,
CADA, Haryana
Bays 39-40, Sector-4,
Panchkula.

SALIENT FEATURES OF BHAKRA CANAL COMMAND PH-II PROJECT

I.) SALIENT FEATURES OF IRRIGATION PROJECT

1	Location – Name of River basin, Tributary, Irrigation Project, headwork				The system takes off from Tajewala Head works Bhakra Canal command (Phase-II)					
	Type of dam				Concrete Dam on the Satluj River					
2	Canal Network									
	A. Main and Branch Canals									
	Canal	Name	CCA (ha)	Discharge at head (Cs.)	No. of direct outlets	Length (KM)	Portion Lined (KM) (%)	Portion Lined (KM) (%)	No. of days of running on full discharge	Weather volumetric devices / discharge measuring structures exist on the canal
	Main Branch Feeder									
	1.	Bhakra Main Branch System	4034	4976	12	96.72	96.72	Nil	As per Rotational Programme	Yes Yes
	Branch									
	1	Fatehabad Branch	1823	1913	5	1084	1084	Nil	-do-	Yes
	2	Sirsa Branch	3554	1300	15	49	49	Nil	-do-	Yes
	3	Ratia Branch System	5753	728	-	22.31	22.31	Nil	-do-	Yes
	4	Narwana Branch	48.67	48.67				Nil	-do-	
	5	Sirsa Branch	1723	1300	10	118	118	Nil	-do-	Yes
	6	Barwala Link						Nil	-do-	Yes
	Feeder									
	1	Deosar Feeder	25657	162	8	41.14	41.14	Nil	-do-	Yes
	2	Ottu Feeder	30575	571	1	21.06	21.06	Nil	-do-	Yes
	3	Dadri feeder	164166	985	56	10.20	10.20	Nil	-do-	Yes

(Source: Haryana Irrigation Department)

The list of Distributaries / Minor / Sub Minors forming part of the project is placed at **Annexure I**

3	Hydrology of Catchment:							
	Catchment area (Sq. KM)	Average Rainfall (mm)	Average Annual flow with years of assessment MCM	75% dependable yield (Design) MCM	75% yield Present MCM	Catchment Ground Water Yield (MCM)	Total yield MCM	Has the yield been affected due to upstream development if show details
	Not applicable							
4	Storage							
	Year of first impounding	Gross (MCM)	Deed MCM	Live (MCM)	FRL (m)	Extent of Evaporation losses MCM (%of present yield)	Average Rate of siltation MCM / year)	Whether rules of operation exists
	The component of renovation and de-silting of existing Irrigation tanks and control structures within the irrigated command does not exist. Hence the information may be considered as NIL							
5	Give details of rules of operation				As per provisions of the Haryana Canal & drainage act 1974			
6	Give no. of structures provided at the time of construction on all canals.				Structures like Head works, regulators and bridges etc were constructed at the time of construction			
7	Has the project been revised at any time. Give details				Yes, after attending the observations of MOWR			
8	Has modernization of the project / canal been undertaken at any stage / give details				Yes			
9	If yes, repeat information 1 to 5 for the modernization project.				The channels were lined and the structure were repaired under the modernization project			

II. SALIENT FEATURES OF THE CAD PROJECT

1	Name of the CAD Project (Whether new / continuing – Year of inclusion if continuing)	Bhakhra Canal Command Project Phase-II Continuing Project 2008-09
2	Name of State and CADA implementing the Project	Haryana Command Area Dev. Authority

Names of the blocks of the Districts. Hisar, Sirsa, Fatehabad, Ambala, Kurukshetra, Kaithal, Karnal & Jind being covered by the project are indicated below:

S.No	Name of District	Name of Block
1	Hisar	Hisar I, Hisar II, Hansi I, Siwani, Uchana, Barwala, Adampur, Narnaund, Agroha, Uklana
2	Sirsa	Sirsa, Baragudha, Ellanabad, Dabwali, Rania, Odha, Nathusari Chopta
3	Fatehabad	Fatehabad, Tohana, Bhattu Kalan, Bhuna, Ratia, Agroha, Bhattu, Jakhal
4	Ambala	Ambala, Barara, Naraingarh
5	Kurukshetra	Pehawa, Shahabad, Thanashar
6	Kaithal	Ghula, Kaithal, Kalayat, Pundri, Rajound
7	Karnal	Assandh, Nilokheri, Karnal, Nissang
8	Jind	Narwana, Uchana

Note: All the villages have been taken in the project area falling in the jurisdiction of above blocks

4	Name, designation, address, phone, fax and e-mail of	
	a) Secretary level	Sh. KK Jalan, IAS Financial Commissioner & Principal Secretary to Govt. Haryana, Irrigation Department, New Secretariat, Sector -17 Chandigarh. Phone No. 0172 -2713496
	b) Administrator, CADA	Sh. Shrikant Walgad, IAS Administrator, CADA, Haryana Bay 39-40 Sector-4, Panchkula. Phone No. 0172 - 2566408 Fax No. 0172 - 2562275 E-Mail: - hrcada@chd nic.in
	c) Chief Engineer level	Sh A.K Aggarwal, Chief Engineer CADA Haryana Bay 39-40 Sector-4, Panchkula. Phone No. 0172 - 2565984 Fax No. 0172 - 2562275 E-Mail: - hrcada@chd nic.in

	d) SE level officers	A Sh.Rammehar Sharma, S.E. CAD Circle, Canal Colony, Hisar. Phone and Fax No. 01662 - 227369 B Sh. Rakesh Chauhan S.E CAD Circle, Canal Colony, Kaithal Phone and Fax No. 01746 - 222028.
	e) Organizational Structure	Sh. B.B Kaushik, H.C.S. Officer on Special Duty, CADA Haryana Bay 39-40 Sector-4, Panchkula. Phone No. 0172 - 2567034 Fax No. 0172 - 2562275 E-Mail: - hrcada@chd nic.in
5	Financial source of the project at State level – whether State funds or through loans or through corporations	State Funds
6	Estimated cost of the CAD Project as originally envisaged at the time of inclusion under CAD Programme.	Rs 73567.15 Lacs.
7	Has the CAD Project executed through foreign assistance at any stage wholly or partly? If yes details.	No
8	Area served by the Bhakhra Command in Ha.	
	Gross Area of the Irrigation Project (Design) covering 1982 W/Cs	393590 Ha
	CCA of the Irrigation Project (Design) covering 1982 W/Cs	351853 Ha.
	Ultimate Irrigation Potential (Design)	306112 Ha.
	Irrigation potential created at the time of Inclusion under CADP	133704 Ha.
	Irrigation Potential utilized at the time of inclusion under CADP	218149 Ha

CCA / IP	At Inception	Target 2008-09	Target 2009-10	Target 2010-11	Target 2011-12	Target 2012-13	Target 2013-14
CCA including under the CADP	351853	11853	34000	34000	34000	34000	34000
Irrigation Potential Created	351853	11853	34000	34000	34000	34000	34000
Irrigation Potential Utilized	218149	2963	8500	8500	8500	8500	8500

9	Activity	As per Design Report	Target 2014-15	Target 2015-16	Target 2016-17	Target 2017-18	Target 2018-19
	Survey, Planning and Designing	351853	34000	34000	34000	34000	34000
	Construction of field channels	351853	34000	34000	34000	34000	34000
	Construction of field, intermediate and link drains	20500	2000	2000	2000	2000	2000
	Reclamation of waterlogged area	6455	650	650	650	650	650
	Institutional sport to Water User's Associations	351853	35000	35000	35000	35000	35000
	Demonstration Plots	2200	200	200	200	200	200
	Adaptive Trials, Action Research	1100	100	100	100	100	100
	Training for officers	550	50	50	50	50	50
	Training to farmers & field staff	5500	500	500	500	500	500
	Correction of system deficiencies	10000	1000	1000	1000	1000	1000

10	Estimated cost (latest) with year	Target 2008-09	Target 2009-10	Target 2010-11	Target 2011-12	Target 2012-13	Target 2013-14
	73567.15	2403.57	7107.40	7115.50	7115.50	7115.50	7115.50

11	Estimated cost (latest) with year	Target 2014-15	Target 2015-16	Target 2016-17	Target 2017-18	Target 2018-19
	73463.44	7115.50	7115.50	7115.50	7115.50	7132.18

12	Intensity of irrigation (Crop season wise and annual	Kharif	Rabi	Total
	(a) As projected in project report	25%	37%	62%
	As envisaged after CAD	37%	50%	87%

13	Cropping pattern (Area / Percent of CCA):								
	Crop name	As envisaged in the Project Report				Present			
		Kharif	Rabi	Perennial	Total	Kharif	Rabi	Perennial	Total
	Kharif								
	Sugar Cane	1416			1416	3997			3997
	Rice	73564			73564	100152			100152
	Cotton	457			457	2864			2864
	Bajra	932			932	2083			2083
	Jawar/ Ganwar	10186			10186	16612			16612
	Misc	1408			1408	4478			4478
	Rabi								
	Barley		169		169		2340		2340
	Wheat		104976		104976		115073		115073
	Gram		273		273		2762		2762
	Oilseeds		12713		12713		25228		25228
	Pulses		39		39		4521		4521
	Fodder		10558		10558		18384		18384
	Misc.		1458		1458		7618		7618
					218149				306112

(Source: Haryana Irrigation Department)

14	Whether consolidation of holdings would be necessary, if so, is there an enabling / compulsory legislation. Status of consolidation of holdings in the State	No.
15	Is it proposed to set up a new Command Area Development Authority (for new projects), if so. (a) The year by which this would be done. (b) What is likely level of appointment to the post of Administrator / Chairman. (c) Proposed Organization structure.	Already in Existence
16	Area affected by water logging (ha) / salinity / alkalinity and indicate the norms for taking areas under water logging.	

	a) Any projects been taken up in the past? if so	No.
	b) Provide details of works included and completed estimated cost and present expenditure.	N. A.
	c) Extend of balance area to be covered.	N. A.
	d) Area proposed to be covered under the programme	351853
17	(a) Range of other activities to be undertaken under the CAD Programme (Please indicate yes or no) i) Consolidation of holding ii) Roads iii) Regulated markets iv) Modernisation of the system v) Processing industries vi) Change in cropping pattern / practices vii) Intensive Agriculture Extension viii) Other (Specify) b) Present status of above CAD activities.	Not applicable
18	Information regarding small / marginal farmers	351853 Ha
	a) Total CCA	279995 Ha
	b) Area held by marginal farmers (upto 1.00 ha)	135415 Ha
	c) Area held by small farmers (upto 1.01 to 2.00 ha)	40.31 %
	d) Percentage of marginal holding to total number of holdings	19.50 %
	e) Percentage of small holdings to total number of holdings	Nil
19	i)What is the percentage (of total population of Scheduled Tribes in the command area)	19.75 %
	ii)What is the percentage (of total population of Scheduled Castes in the Command Area)	NA
20	Whether irrigation component of the Project has been cleared by Planning Commission, if so the letter no. and date of clearance	NA
21	Whether CAD component of the Project has been cleared by Planning Commission, if so date of clearance.	NA
22	Whether provision for taking up of the Project has been made in the 11 th Five Year Plan.	Yes
23	Whether the project report along with the related maps has been enclosed or not along with above data.	Yes

24	Total time required for completion of CAD Project	11 Years.
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25	Cost of the CAD Project as proposed and year-wise and Plan-wise phasing of expenditure.	Year	Area in Ha.	Cost in lacs
		XI th Plan		
		08-09	11853	2403.57
		09-10	34000	7107.40
		10-11	34000	7115.50
		11-12	34000	7115.50

				23741.97

		XII th Plan		
		12-13	34000	7115.50
		13-14	34000	7115.50
		14-15	34000	7115.50
		15-16	34000	7115.50
		16-17	34000	7115.50

				35577.50

		XIII th Plan		
		17-18	34000	7115.50
18-19	34000	7132.18		

		14247.68		

	G. TOTAL	73567.15		