

## TERMS OF REFERENCE

1. Command Area Development and Water Management (CADWM) is an important programme being implemented by the Department of Land Development and Water Resources, Government of Uttar Pradesh. The main objective of the programme is to realize the potential of irrigation created by the irrigation projects. It also entails ensuring efficient utilization of water in agriculture reducing / eliminating the wastage of irrigation water. The CADWM programme has contribution of Central Government, State Government and the farmers in ratio 50:40:10 respectively. The main work under the programme being implemented in Uttar Pradesh is construction of Field Irrigation Channels (Lined / Unlined) emanating from Kulaba / outlet of canals. One Kulaba Command generally has 40 hectares (100 acres) of land. The Department of Land Development and Water Resources through Ram Ganga Command and Sharda Command is implementing this programme in 15 irrigation project areas. Some new projects are also under consideration for approval in Bundelkhand region.
2. Ongoing Projects: The following 15 irrigation projects are there in which command area development work is going on.

S.N	Irrigation Projects	Year of Initiation	Cultural Command Area (Lac. Ha.)	Area covered by CADA works till March 2012 (Lac. Ha.)
	<b>Ram Ganga Command</b>			
1	East Ganga Canal	1990-91	2.33	0.765
2	Betwa and Gursarai Canal	1990-91	4.22	2.715
3	Ken Canal System	1990-91	2.22	1.092
4	Upper Ganga Canal	1990-91	4.57	3.703
5	Madhya Ganga Canal	1990-91	2.29	0.778
6	Belan Pump Canal	1997-98	0.71	0.43
7	Tons Pump Canal	1997-98	0.34	0.27
8	Son Pump Canal	1997-98	0.93	0.48
9	Tumariya Dam Canal	2000-01	0.64	0.25
10	Jakhlaun Pump Canal	2009-10	0.29	0.16
11	Lower Rajghat	2009-10	0.43	0.20
	<b>Sharda Command</b>			
12	Sharda Canal Project	1989 - 90	16.13	9.27
13	Sharda Sahayak Canal System Ph. - II	2009-10	3.30	0.46
14	Saryu Canal System	2009-10	2.80	0.26
15	Sirsi Dam Canal	2010-11	0.448	0.006
	<b>Grand Total</b>		<b>41.64</b>	<b>20.83</b>

3. **METHODOLOGY:** The irrigation projects have main canal, branch, distributaries, and minors through which water is distributed to the agricultural land. The irrigation water reaches the farmer's field through kulaba / outlets. The Kulaba / outlets are constructed by the Irrigation Department and are mostly of one cusec. The construction of Field Irrigation Channels (Lined and Unlined) from kulaba to farmer's field is done by this department through Ram Ganga Command Authority and Sharda Command Authority. One Kulaba command is generally of 40 hectare (100 acres). The development of kulaba command should start from head to tail in the irrigation system to ensure efficient utilization of irrigation water. The command of kulaba is taken from the irrigation department (31-IB). The same is traced in which all khasara plots are mapped by the Department's officials. The next step is to obtain details of farmers who own the land in this command. This information is taken from the records of the Revenue Department. There after field survey is done using techniques and instruments to plan the channels (both lined and unlined) in the command area in a manner to ensure that the irrigation water reaches each field in that kulaba command. The lined field channel is constructed at the beginning of the kulaba / outlet in length permissible under the funds available. The funds available for On-Farm development works is Rs.15000 per hectare. In given funds presently the maximum length of lined canal is 15 meters per hectare and unlined canal is 70 meters per hectare along with cistern / siphons and other structures required as per the local requirements.
4. **TASKS EXPECTED FROM THE SELECTED AGENCIES:**

**Task -1:** The selected agencies will first be required to digitize the command area of the irrigation system on which it is assigned the work. In digital map all the channels including main channel, branches, distributaries, minors and kulabas / outlets on them should be digitized to the scale. Information should be collected about the kulaba / outlet on which the command development (On Farm Development) work has been carried out earlier and those on which it is not done so far. The agency will also have to identify such kulabas / outlets which are not functional or on which doing On Farm Development (OFD) work may not be useful. This may be due to the fact that water has not reached that outlet for a long time due to paucity of water in the irrigation system or any other reason to be specified in their report. These three category of kulaba / outlets should be shown in different colors (Green for covered, yellow for uncovered and red for those where coverage is not possible). The base map and information available in the department will be made available to the Agency, but the responsibility of procuring and assimilating the information lies with the Agency.

**Task 2:** Survey and data collection of outlets on which OFD work is to commence, the important information required are map of kulaba command, farmers list in that command, alignments of field channel to reach each farm land. The design, estimation and projectization of project at each kulaba will be required to be done. The estimates of 10 kulabas or all kulabas a minor can be clubbed together to form one Project Document.

**Task 3:** The selected Agency will also be required to monitor the ongoing work at different stages (minimum two: bed preparation and near completion).

5. A Committee which will screen the applications and carry out the selection process will be constituted. The constitution of the Committee will be tentatively as follows:
  - (a) Principal Secretary, Department of Land Development and Water Resources - Chairperson.
  - (b) Administrator, Ram Ganga Command - Member.
  - (c) Administrator, Sharda Command - Member.
  - (d) Joint Director, Samadesh Bandhu – Member Secretary.
  - (e) Finance Controller, Sharda Command – Member.
  - (f) Finance Controller, Ram Ganga Command – Member.
  
6. The requirement for Technical Qualification will be as follows:
  - (a) The Agency should be registered as a legal entity for at least three years.
  - (b) The Agency should have executed survey / project preparation / map or data digitization work / monitoring work worth 10 lacs in last three years cumulatively.
  - (c) The Agency should have a team of experts to work on the Project. The bio-data of present / proposed team members be given with the application.
  
7. The work of digitization, survey, project preparation, and monitoring will be given to one Agency on one irrigation system as far as possible. As indicated above three Agencies will be selected in each command. The L-1 quote on financial bid by the technically qualified applicant Agency will be the selection criteria, and the L-2, L-3, L-4 ... quote making Agency will be asked to carry out the work on L-1 quote in that order. The financial bid will be opened only of technically qualified applicants in presence of their representatives.
  
8. The project preparation will be done on the basis of current schedule of rates and material rate decided by the Department for that division where project is being prepared.
  
9. Bid Parameter:

S.NO	Item of work	Quoted / Bid Rate (Rs. / Hectare of CCA)
1	Collection and digitization of information / map on irrigation system (including identifying kulaba / outlet on which OFD work done, cannot be done and where it is required to be done)	Rs. ----- per hectare
2	Survey, data collection, drawing, design and estimation of work on each Kulaba / outlet; Projectization for 10 kulabas as one Project.	Rs. ----- per hectare
3	Monitoring of ongoing work (minimum two stages: bed preparation and near completion)	Rs. ----- per kulaba / outlet

10. Terms of Payment:

- (a) The digitization and data collection / collation work should be completed in Six month time for one system. The time will begin with the work allocation order.
- (b) The survey and project preparation work should be carried out and be completed in three month time. The work order for above two set of work may be issued together.
- (c) The monitoring work will commence immediately after allocation of work and will continue till completion of the same.
- (d) The product / deliverables will be presented before the Committee and on the recommendation of the Committee the payment will be released by the respective Command Authority in whose area the Project is situated. The payment for digitization work will be done only on completion of the work to the satisfaction of the Authority, whereas, the payment for projects will be released on submission of project report for at least 10 kulaba / outlet which will be considered as one Project. The payment will be done from the funds under the head of survey work and administrative expenditure under the CADWM programme.

11. To know more about the CADWM programme and work involved the prospective applicants are strongly advised to visit the sites: [www.dolr.nic.in](http://www.dolr.nic.in) and [www.upldwr.up.nic.in](http://www.upldwr.up.nic.in).

12. The completed application should be submitted on following address of SamadeshBandhu:

Room No: 44 (Third Floor), Bahukhandi Bhawan, Department of Land Development and Water Resources (Samadesh Cell), Lucknow.

13. For any further information and clarification the contact person in the Department will be:

Shri. Ugrasen Sahi, Joint Director, Samadesh Cell: Phone no: 0522-2238425.