

PRE-QUALIFICATION DOCUMENT (PQD)

PROVISION OF LASER LAND LEVELERS TO THE FARMERS/ SERVICE PROVIDERS

1. Introduction

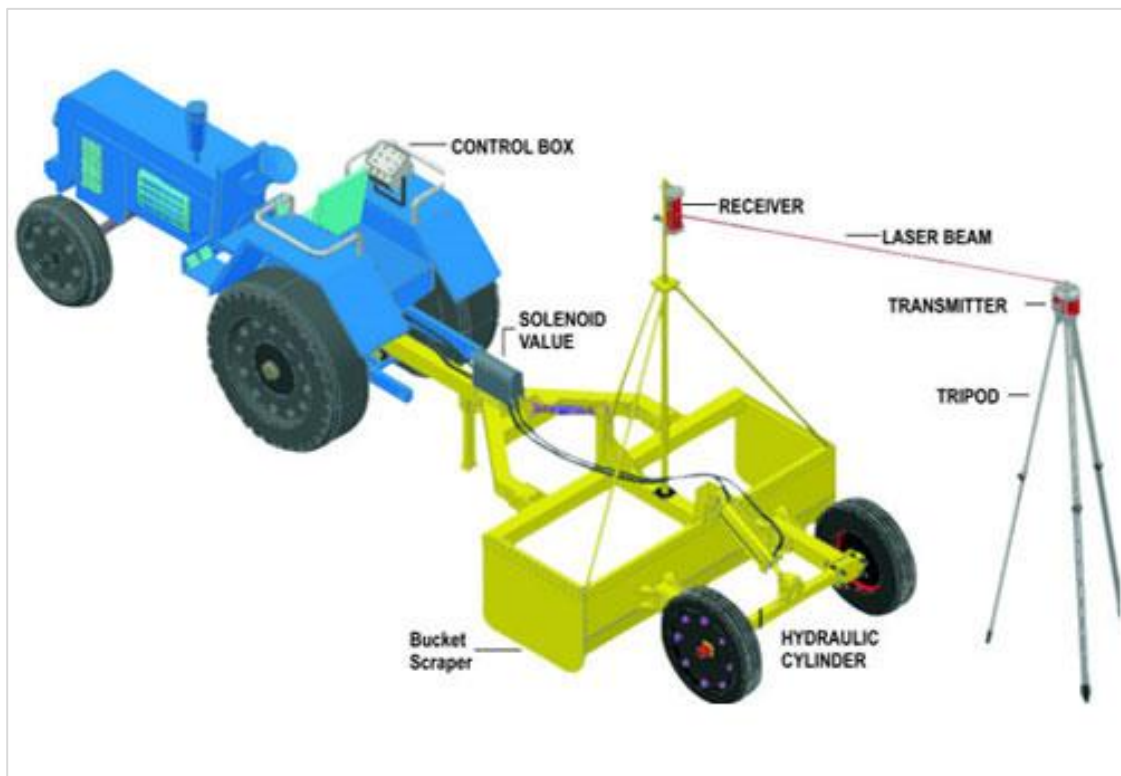
The World Bank assisted “Punjab Irrigated-Agriculture Productivity Improvement Project (PIPIP)” is under implementation since July 2012 in the entire province. It spans over a period of five years (2012-13 to 2016-17) with a total cost of Rs. 36,000 million (government share of Rs. 21,250 million, all IDA financing, and farmers’ contribution of Rs. 14,750 million). The PIPIP envisages installation of high efficiency irrigation systems (HEISs) on 120,000 acres, improvement of 5,500 unimproved watercourses, completion of lining on 1,500 already improved watercourses in canal commands, rehabilitation of 2,000 irrigation schemes outside the canal commands and provision of 3,000 LASER units to the farmers/service providers, and. The key objective of the project is to maximize productivity of irrigation water.

Government of the Punjab has launched ADP funded project titled” Provision of Laser Land levelers to Farmers/ Service Providers on Subsidized Cost” at a total cost of Rs.1,350 million for provision of 6,000 Laser land levelers to the farmers/service providers during three years (2015-16 to 2017-18). It has been approved to provide one time financial assistance of Rs. 450,000 per LASER unit, out of which half amount (Rs. 225,000) will be provided out of ADP funded “Provision of Laser Land Levelers to Farmers/ Service Providers on Subsidized Cost” and remaining Rs. 225,000 from the World Bank assisted PIPIP.

2. LASER Land Leveling Technology

Precision land leveling (PLL) is a mechanical process of grading and smoothing the land to a precise and uniform plane surface at grade or no grade (zero slope) with variation of less than ± 20 mm (2cm). Generally, traditional method is used for PLL that involves earth movement with bucket type soil scrapers and tractor mounted rear blades but it is very laborious and too expensive to finish the land surface to exact grade. Precision land leveling is being promoted since inception of OFWM Program. Use of LASER technology in the

precision land leveling is the latest development, which was introduced in the Punjab during 1985. The LASER controlled land leveling system consists of a LASER transmitter, a signal receiver, an electrical control panel, and a solenoid hydraulic control valve. The LASER transmitter transmits a LASER beam, which is intercepted by the signal receiver mounted on a leveling blade attached to the tractor. The control panel mounted on the tractor interprets the signal from the receiver and opens or closes the hydraulic control valve that raises or lowers the leveling blade. The same has proved to be highly beneficial because it minimizes the cost of operation, ensures better degree of accuracy in much lesser time, saves irrigation water, ascertains uniform seed germination, increases fertilizer use efficiency, and resultantly enhances crop yields.



LASER Land Leveling Operation

3. Selection of Farmers/Service Providers

An applicant will be eligible for the grant of financial assistance provided that the person

- a) *possesses a tractor capable of operating LASER unit;*
- b) *is owner/tenant of land not more than 12.5 acres and is preferably agricultural machinery service provider or an agricultural graduate possessing requisite land ownership;*
- c) *will agree to rent out the equipment for LASER land leveling in the area;*

- d) *undertakes to carry out/provide rental services for LASER land leveling of 300 acres per unit annually during project period; and*
- e) *will be liable to pay full amount of financial assistance received for the purpose as arrears of land revenue in case of violation of any of the conditions of the scheme.*

4. Supply and Service Companies

Locally manufactured LASER land leveling units as well as imported systems are readily available in Pakistan. The farmers/service providers have the option to purchase the LASER equipment of their own choice. The Agriculture Department has already approved standards & specifications of LASER equipment for supply of LASER units to the farmers/ service providers under the PIPIP. The department has prequalified **14** Supply & Service Companies (SSCs) for provision of LASER units to the farmers/ service providers. These suppliers/manufactures have been short-listed alongwith their units in order to safeguard quality of the equipment to be procured under the project. The farmers have the option of purchasing the equipment of his/her own choice from amongst pre-qualified firms.

5. Implementation Arrangements

The implementation modalities to be followed for the proposed project are described hereunder.

- i) The quota for each district, preferably based on balance requirement of LASER land levelers, will be approved by the Project Steering Committee (PSC) of the PIPIP and the same will be conveyed to the districts by the DGA (WM).
- ii) Massive awareness and publicity campaign will be launched through print/ electronic media at the provincial level as well as in the districts.
- iii) Agriculture Department will advertise for invitation of applications from the farmers interested to work as service providers for LASER land levelling rental services.
- iv) All districts will be informed about the time bound action plan for provision of LASER land levelers to the farmers/service providers.
- v) The applications will be received/ collected in the office of District Officer (OFWM) that will be scrutinized vis-à-vis approved criteria by the designated committee.
- vi) The ineligible applicants will be informed about rejection of their applications who may submit appeal against the ineligibility within specified period and concerned authority will decide the eligibility/ ineligibility after hearing appeals within stipulated timeframe.
- vii) The DO (OFWM) will convey the complete list of eligible applicants to the DGA (WM) for confirmation of quota as the activity will be demand driven. In case of less number of eligible applicants than allocated quota, the extra LASER units will be allocated to other districts where demand is higher than the available quota for the district.

- viii) The allotment of LASER units to the eligible applicants will be made by the District Allotment Committee (DAC).
- ix) The allotment letters will be issued to the successful applicants by the DO (OFWM) with the advice to book LASER units with pre-qualified firm within 30 days of allotment by submitting original draft of his/her entire/full share, drawn in favour of short-listed firm of his/her choice to concerned DO (OFWM).
- x) The DO (OFWM) will forward the bank draft to DGA (WM) for issuance of work order to concerned firm.
- xi) Director General Agriculture (Water Management) will issue advice to the concerned firm for supply of booked LASER unit within 90 days of the issuance of this advice (or period specified in the supply order) under intimation to the concerned DO (OFWM).
- xii) The supplier firm will ensure delivery of booked unit within stipulated period and defaulting firms will be dealt as per government Rules.
- xiii) In case of failure of a firm to deliver the unit within specified time, the farmer will have the choice to book the LASER unit with one of the other pre-qualified supplier firms through concerned DO (OFWM) and DGA (WM).
- xiv) A committee comprising of representative of concerned DO (OFWM), representative of concerned RPCU, recipient farmer/service provider, and Field Engineer of consultants will inspect the equipment jointly and record the make, model, serial number and other features of all components of LASER unit.
- xv) The technical inspection report, duly signed by the inspection team, will be sent by DO (OFWM) to DGA (WM) for releasing payment.
- xvi) DGA (WM) will hand over the original draft of concerned allottee's share to the firm alongwith project assistance.

6. Cost Sharing Arrangements

It is planned to provide one time financial assistance of Rs. 450,000 per unit to the farmers/service providers, out of which Rs. 225,000 will be borne by the Punjab Government and Rs. 225,000 by the World Bank under PIP. It is pointed out that eligible beneficiary is required to own a tractor capable of operating LASER unit and submit valid document/proof for the purpose.

7. Training of Farmers/ LASER Operators and Technical Support

OFWM staff available at tehsil level will provide technical assistance and backup support for carrying out LASER land leveling in the field. Water Management Training Institute (WMTI), Lahore will arrange training for capacity building of the service providers/farmers or their Tractor / LASER Operators in following activities.

- ◆ Survey and designing for LASER land leveling
- ◆ Planning and development of farm layouts considering soil type, farmer's tillage equipment, crops to be grown, source/quality of irrigation supplies etc.
- ◆ Operation of LASER units

◆ Maintenance and trouble-shooting of equipment

Training courses will be conducted for LASER Operators in “LASER Land Leveling” to train one operator for each LASER unit.

8. Eligibility Criteria

The firm(s)/ joint venture(s) having the following strength/ background would be eligible for prequalification under the scheme for the project period and will be renewed every year based on specified performance criteria.

- (i) Must have /be willing to establish an office in Pakistan;
- (ii) Must be manufacturer or sole distributor or authorized dealer of specific make of LASER equipment meeting approved technical specifications of the Punjab Agriculture Department and must agree to supply compatible complete unit including scraper (Attach valid sole distributor certificate and complete specifications of LASER equipment and its scraper along-with brochure). The Firm(s) may enter into joint venture (JV) with manufacturer/sole distributor to strengthen its capability to provide the requisite services for the purpose. The firm(s) may offer more than one model of LASER equipment of same make/brand. The firm (manufacturer/sole distributor), if it enters into JV with other firm(s), cannot be applicant separately as well as may not be partner firm in any other JV for prequalification as SSC. The JVs are allowed to utilize the standing of partner firms independently or jointly in terms of technical expertise, relevant experience and financial capacity to fulfill the requisite eligibility criteria for prequalification. The relevant experience of business in Pakistan would only be considered;
- (iii) Must be registered with the Income Tax/ Sales Tax Departments in case of local firms (Attach copy of valid NTN Certificate and GST Certificate);
- (iv) Must be in business for last three years;
- (v) Must have experience of providing at least 30 LASER units in public/ private sector during last three years (Attach year-wise list of purchasers/ beneficiaries with name, complete address, phone/fax, and date of delivery). Any additional document may be furnished to support relevant experience of firm(s)/Joint Venture);
- (vi) Must have available stock of complete LASER equipment (without scraper) to provide 20 LASER units to farmers/ service providers;
- (vii) Must have adequate technical staff including a minimum of three Technicians (each having 2 years relevant experience) for proper after-sale service (Provide list of staff and their C.Vs indicating qualifications & relevant experience. Also attach academic and experience testimonials of each Technician. The firm will also furnish undertaking to recruit additional staff as per project requirements, if necessary);
- (viii) Must have minimum average annual turnover of Rs. 5 million, which in case of JV could be of the partner firms independently or jointly for the period of the last three years (Attach verified Income Tax Returns);
- (ix) Must provide affidavit confirming that: (a) applicant firm(s)/joint venture(s) have never been blacklisted by any government department (If ever black listed, then provide the case history and current status of the firm regarding this decision). (b) all the information provided by the applicant firm/joint venture is correct; (c) the firm agrees to supply compatible complete unit including scraper; (d) the firm is willing to recruit the additional staff as per project requirements, if required; and
- (x) Must attach pay order/ bank draft amounting to Rs. 10,000/- in the name of Director General Agriculture (Water Management) Punjab, Lahore as non-refundable processing fee for prequalification.

9. Approved District-Wise Targets

Provision of LASER Land Levelers to the Farmers/ Service Providers on Subsidized Cost

Proposed District-Wise Distribution of LASER Land Levelers

Sr. No.	District	Irrigated Land (Acres)	Total Requirement of LASER Units (Nos.)	LASER Units Available (Nos.)	Balance Requirement (Nos.)	Proposed Quota (Nos.)
1	R.Y. Khan	1,381,859	1,152	756	396	173
2	Bahawalnagar	1,490,203	1,242	503	739	322
3	Bahawalpur	1,243,103	1,036	322	714	311
4	Faisalabad	1,309,630	1,091	409	682	298
5	Chiniot	509,406	425	136	289	126
6	Jhang	1,113,851	928	245	683	298
7	Toba Tek Singh	735,598	613	287	326	142
8	D.G.Khan	600,643	501	124	377	164
9	Layyah	737,498	615	210	405	176
10	Muzaffargarh	1,197,485	998	222	776	338
11	Rajanpur	617,750	515	132	383	167
12	Gujranwala	1,047,324	873	304	569	248
13	Gujrat	300,322	250	92	158	69
14	Hafizabad	638,658	532	134	398	174
15	M.B.Din	644,361	537	198	339	148
16	Narowal	456,185	380	98	282	123
17	Sialkot	762,208	635	203	432	188
18	Lahore	306,024	255	115	140	61
19	Kasur	971,293	809	320	489	213
20	Nankana Saheb	549,322	458	137	321	140
21	Sheikhupura	1,001,705	835	265	570	248
22	Multan	826,835	689	312	377	164
23	Khanewal	1,024,515	854	293	561	245
24	Lodhran	809,728	675	286	389	170
25	Vehari	1,174,675	979	332	647	282
26	Sahiwal	798,323	665	271	394	172
27	Okara	1,155,668	963	726	237	103
28	Pakpattan	727,995	607	369	238	104
29	Sargodha	1,018,812	849	291	558	243
30	Bhakkar	741,300	618	177	441	192
31	Khushab	249,001	208	79	129	56
32	Mianwali	477,093	398	77	321	140
Total		26,618,372	22,182	8,425	13,757	6,000

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