



POSITION PAPER FOR PDWP

Project Profile:

1.	Project Title	Chief Minister's Program for Solarization of Agricultural Tubewells in Punjab
2.	Location	All Punjab
3.	Sponsoring Agency	Agriculture Department
4.	Executing Agency	Punjab Energy Efficiency & Conservation Agency (PEECA), Energy Department
5.	Operation and Maintenance	a) One (1) Year Defect Liability period by the Contractors b) Beneficiary Farmers
6.	Approved Cost	Rs. 8,826.300 Million by PDWP on 18.11.2024
7.	Allocation 2024-25	Rs. 2,500.000 million
8.	Expenditure Till Date	Rs. 0.000 million
9.	Approved Gestation Period	20 months (November 2024 to June 2026)

10. Brief Background:

The PC-I of the project to solarize 7,000 electric agricultural tube-wells in order to reduce irrigation costs and promote solar irrigation was submitted to P&D Board by Agriculture Department on 02.06.2024. The project was approved by PDWP in meeting held on 24.07.2024 at a cost of Rs. 8,346.264 million to deliberate on the issue of exclusion of certain districts that may arise due to imposition of water table depth limit of 60 feet. Afterwards, the project modalities and eligibility criteria of beneficiary were finalized in a meeting held under the chairmanship of Chief Secretary Punjab on 16.10.2024. The Amended PC-I for solarization of 8000 agricultural tube-wells (50% diesel and 50% electric) was approved by PDWP at a cost of Rs. 8,826.300 million on 12-11-2024.

11. Project Objectives:

The broad objectives of the project are:

- i) Increase in farmers' profitability through reduction in operational cost of tube well based irrigation.
- ii) Promote solar-powered irrigation for agricultural resilience and adaptation to climate change.
- iii) Reduce greenhouse gas emissions through replacing fossil fuel and grid electricity with solar energy.
- iv) Create job opportunities in rural areas through promotion of solar-powered irrigation systems.

12. Approved Project Scope:

Approved project scope by PDWP meeting dated 18.11.2024 is as follows:

(Rs. in Million)

Approved scope	Solar Capacity (KW)	Unit Cost	Government Subsidy (Fixed)
Total 8,000 Tube-wells (50% Electric and 50% Diesel with district wise quota) (<u>Annex-A</u>)	10	1.561	0.500
	15	2.093	0.750
	20	2.566	1.000

13. Reasons of Revision:

- i) The majority (88%) of applications for tube-well subsidies were received from farmers using diesel tube-wells, while only 12% came from electric tube-well owners, different from the approved 50:50 quota. During **CM Agricultural Transformation Plan** review meeting held on January 29, 2025, Minister for Agriculture proposed revision in the ratio to 80:20 (diesel: electric) to align with demand and ensure transparency. The Chief Minister approved this revision in principal, and district-wise targets based on the new ratio were finalized for balloting (**Annex-B**). The detail of applications received and verified for the ballot is given below:

Applications	Electric	Diesel	Total
Total number of applications received	64,969 (12%)	468,170 (88%)	533,139
Total number of verified applications for balloting	50,004 (13%)	385,128 (87%)	385,128

- ii) Some farmers having domicile of Islamabad own land in Punjab have also applied for the subsidy scheme. To accommodate them, a minor adjustment in the eligibility criteria has been requested by Agriculture Department, thereby allowing both Punjab and ICT residents with land in Punjab to apply.

14. Proposals for Consideration of PDWP:

The following proposals are placed before PDWP for consideration/approval:

Proposal-I (District-wise Quota):

PDWP may review and approve the revision of the ratio to 80:20 (diesel: electric) to align with residents' demand while maintaining the existing district-wise quota and targets for the solarization of tube-wells, ensuring demand-based project implementation. The detail is as under:

Item	Total TWs	Diesel TW	Electric TW
Already approved PC-I	8,000	50% (4,000 TWs)	50% (4,000 TWs)
Revised Proposal	8,000	80% (6,400 TWs)	20% (1,600 TWs))

Proposal-II (Eligibility Criteria):

PDWP may consider / approve the proposed change in the eligibility criteria for smooth implementation of the project.

Item	Eligibly Criteria
Already approved PC-I	Applicant is the resident of Punjab Province (attach a copy of valid CNIC). One farmer will get one facility/ solar system only from the family.
Revised Proposal	Applicant is the resident of Punjab Province and ICT (attach a copy of valid CNIC). One farmer will get one facility/ solar system only from the family.

PART-B

15. Proceedings of Pre-PDWP:

The Pre-PDWP meeting was held on 13.02.2025, chaired by Member (Agriculture), P&D Board, discussed the position paper. The representatives from Agriculture, Finance and Energy Departments also attended the meeting. The deliberations of the Pre-PDWP are summarized below:

- i. The Chair inquired whether the 50:50 ratio (diesel: electric) and district-wise quota for electric and diesel tube-wells was approved by the Provincial Cabinet. DGA (OFWM), Agriculture Department clarified that it was part of the PC-I and approved by the PDWP forum.
- ii. Chief (Agriculture) questioned if ICT residents had been included in the past ADP schemes of Agriculture Department. Deputy Secretary (Planning), Agriculture Department informed that there is no such precedent.
- iii. The concerns were also raised regarding the eligibility of ICT residents, as the PC-I requires applicants to be Punjab residents. DGA (OFWM), Agriculture Department highlighted that around 100 applications were received from Islamabad-based farmers with land in Punjab. The Chair observed that modifying eligibility criteria might lead to concerns among affected applicants of Punjab Province.

16. Recommendation:

The scheme, with a revised ratio of 80:20 (diesel: electric) in light with farmers response while keeping the existing district-wise quota and targets for tube-well solarization, is placed before the PDWP forum for approval. The project, costing Rs. 8,826.300 million, has a gestation period of 20 months (November 2024 – June 2026). The proposal does not have additional financial implication.

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APPROVED QUOTA OF DISTRICT-WISE DIESEL AND ELECTRIC TUBEWELLS

Division/District	Total Number of Tubewells (Geo-tagged data)	District Share/ Proportionate Share	Diesel TWs Target (Nos.) (50%)	Electric TWs Target (Nos.) (50%)
Bahawalpur Divn.	179,488	1,176	588	588
Bahawalpur	26,028	170	85	85
Bahawalnagar	60,162	394	197	197
R.Y. Khan	93,298	612	306	306
D.G. Khan Divn.	135,511	890	445	445
D.G. Khan	53,971	354	177	177
Layyah	31,657	208	104	104
Muzaffargarh	47,161	310	155	155
Rajapur	2,722	18	9	9
Faisalabad Divn.	175,811	1,154	577	577
Faisalabad	73,493	482	241	241
Chiniot	36,816	242	121	121
Jhang	31,133	204	102	102
Toba Tek Singh	34,369	226	113	113
Gujranwala Divn.	292,173	1,918	959	959
Gujranwala	84,127	554	277	277
Gujrat	21,136	140	70	70
Hafizabad	31,501	206	103	103
Mandi Baha-ud-Din	39,454	258	129	129
Narowal	50,455	330	165	165
Sialkot	65,500	430	215	215
Lahore Divn.	140,034	920	460	460
Lahore	7,237	48	24	24
Kasur	36,722	240	120	120
Nankana Sahib	36,808	242	121	121
Sheikhupura	59,267	390	195	195
Multan Divn.	84,330	556	278	278
Multan	23,004	150	75	75
Khanewal	31,132	206	103	103
Lodhran	9,101	60	30	30
Vehari	21,093	140	70	70
Rawalpindi Divn.	18,774	126	63	63
Rawalpindi	406	4	2	2
Attock	2,863	20	10	10
Chakwal	8,528	56	28	28
Jhelum	6,977	46	23	23
Sahiwal Divn.	86,734	570	285	285
Sahiwal	17,659	116	58	58
Okara	52,663	346	173	173
Pakpattan	16,412	108	54	54
Sargodha Divn.	104,965	690	345	345
Sargodha	35,542	232	116	116
Bhakkar	37,141	244	122	122
Khushab	10,493	70	35	35
Mianwali	21,789	144	72	72
G. Total	1,217,820	8,000	4,000	4,000

Source: Punjab Irrigation Department (Water Resources Zone, Lahore)

DISTRICT-WISE PROPOSED QUOTA OF DIESEL AND ELECTRIC TUBEWELLS

Division/ District	Total Number of Tubewells (geo- tagged data)	District Share/ Proportionate Share (Nos.)	Diesel TWs Target (Nos.) (80%)	Electric TWs Target (Nos.) (20%)
BAHAWALPUR DIVN.	179,488	1,176	941	235
BAHAWALPUR	26,028	170	136	34
BAHAWALNAGAR	60,162	394	315	79
R.Y. KHAN	93,298	612	490	122
D.G. KHAN DIVN.	135,511	890	712	178
D.G. KHAN	53,971	354	283	71
LAYYAH	31,657	208	166	42
MUZAFFARGARH	47,161	310	248	62
RAJANPUR	2,722	18	14	4
FAISALABAD DIVN.	175,811	1,154	923	231
FAISALABAD	73,493	482	386	96
CHINIOT	36,816	242	194	48
JHANG	31,133	204	163	41
TOBA TEK SINGH	34,369	226	181	45
GUJRANWALA DIVN.	292,173	1,918	1,534	384
GUJRANWALA	84,127	554	443	111
GUJRAT	21,136	140	112	28
HAFIZABAD	31,501	206	165	41
MANDI BAHA-UD-DIN	39,454	258	206	52
NAROWAL	50,455	330	264	66
SIALKOT	65,500	430	344	86
LAHORE DIVN.	140,034	920	736	184
LAHORE	7,237	48	38	10
KASUR	36,722	240	192	48
NANKANA SAHIB	36,808	242	194	48
SHEIKHUPURA	59,267	390	312	78
MULTAN DIVN.	84,330	556	445	111
MULTAN	23,004	150	120	30
KHANEWAL	31,132	206	165	41
LODHRAN	9,101	60	48	12
VEHARI	21,093	140	112	28
RAWALPINDI DIVN.	18,774	126	101	25
RAWALPINDI	406	4	3	1
ATTOCK	2,863	20	16	4
CHAKWAL	8,528	56	45	11
JHELMUM	6,977	46	37	9
SAHIWAL DIVN.	86,734	570	456	114
SAHIWAL	17,659	116	93	23
OKARA	52,663	346	277	69
PAKPATTAN	16,412	108	86	22
SARGODHA DIVN.	104,965	690	552	138
SARGODHA	35,542	232	186	46
BHAKKAR	37,141	244	195	49
KHUSHAB	10,493	70	56	14
MIANWALI	21,789	144	115	29
G. TOTAL	1,217,820	8,000	6,400	1,600