

MINISTRY OF JAL SHAKTI

**DEPARTMENT OF WATER RESOURCES, RIVER
DEVELOPMENT & GANGA REJUVENATION**

**STANDARD OPERATING PROCEDURE (SOP) FOR
MONITORING OF PMKSY-HKKP-GROUND WATER
SCHEME**



Central Ground Water Board

Faridabad

March'2021

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Central Ground Water Board

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Standard Operating Procedure (SoP) for monitoring of PMKSY-HKKP-Ground Water scheme

Introduction:

Pradhan Mantri Krishi Sinchayi Yojana (PMKSY) was formulated with the vision of extending the coverage of irrigation '*Har Khet Ko Pani*'(HKKP) in a focused manner. The scheme of PMKSY was approved in 2015-16 has, inter-alia, a component of Ground Water for creating additional irrigation from ground water resources. Ground water component aims utilizing ground water for irrigation purpose in areas, where ground water is sufficiently available. Further, to enhance small and marginal farmer's income in such areas by providing assured irrigation facility under the scheme.

Operational guidelines for Ground Water component were issued by the Department of Water Resources, RD & GR, Ministry of Jal Shakti vide OM no P-15011/24/2016-SPR/2037-2105 dated July 2016. However, keeping in view of various requirements to implement the scheme and feedback received from State Governments, guidelines have been revised on 8.11.2018 and 28.05.2019. The scheme effectively launched in 2019-20 after revision of guidelines.

The beneficiary under this scheme are small and marginal farmers only with priority to be given to SC/ST and Women farmers. Ground Water irrigation facility through Dug wells, Dug cum Bore wells, Tube wells and Bore wells etc. can be funded for schemes in areas other than Over Exploited(OE), Critical or Semi-Critical meeting the following criteria:

- Less than 60 per cent of the annual replenishable groundwater resources have been developed.
- Average annual rainfall of 750 mm or more to have availability of enough water for recharge;
- Shallow groundwater levels within range of 15m below ground level or less during pre-Monsoon period.

Funding pattern under the scheme is in the ratio of 90: 10 (C:S) in case of NE/Hilly areas and 60:40 (C:S) in case of other areas.

Ground water development for irrigation can be planned in such a way that after implementation of the project, stage of Ground Water extraction should not exceed 70% at any time. The guidelines outline measures to prevent over-exploitation and facilitate recharge to ground water. Suitable recharge measures are to be taken up under NRM component of MGNREGS or any other recharge scheme in the target area of the present scheme to provide sustainability to ground water. State/UT Government are supposed to ensure that micro-irrigation practices are implemented in at least 30% of the proposed irrigated area in convergence with relevant scheme(s) of Central/State/UT Governments. However, there is no provision of funding for micro irrigation.

The SoP describes mainly about the role and responsibility for monitoring of proposals under PMKSY-HKKP-GW scheme at CGWB Regional Directorate level and PMKSY Cell, CGWB, CHQ Faridabad level.

1. Monitoring at CGWB Regional Directorate level:

The following Standard Operating Procedures (SOP) are adopted at the Regional Directorates level of CGWB for monitoring of the projects under PMKSY-HKKP-GW:

1. The Nodal officer is to coordinate with the concerned dept. of state govt. for early submission of the proposal/s in the eligible blocks as per operational guidelines of the scheme.
2. Once the proposal is received from the state govt., it has to be scrutinized and feasibility of the proposal is to be ascertained as per the guidelines. If modifications are required, the comments on the proposal are to be sent to the state govt. for revision of the proposal, otherwise forwarded to PMKSY Cell, CHQ, Faridabad/Ministry with Check list and recommendation of the Regional Director for approval of project.
3. Regional Directorate will coordinate with State Govt to provide replies of clarification sought by Ministry/ PMKSY Cell on proposal and ensure timely submission of information.
4. After issuance of administrative approval, Regional Directorate will coordinate with State Govt for compliance of conditions as stipulated in Administrative Approval, by State Government for signing of MOU.

5. Once MoU has been signed and 1st instalment of central assistance is released to the state govt., the monitoring of project is to be carried out under following steps.

(i) Tenders: Regional Directorate to be familiar with points like Issuance of tender, Award of tender, date of completion of work as per tender, conditions in tender etc.

(ii) Site Inspection:

(a) Inspection teams: The team will comprise of Officers from CGWB Regional Directorate and representatives of implementing agency of appropriate level.

(b) Site Inspection: This will be carried out in three steps.

- Pre Project inspection - after site selection
- Inspection during construction of scheme
- After completion of scheme

(c) Parameters to be inspected:

Type of the well constructed, its details like depth, dia, material and other specification of wells, Type of Pump, its capacity and other specifications, details of Solar Panels and other details in case of solar Pumps, details of electric supply upto Tube well pump from nearby Electric sub-station in case of electric pump, specifications of Distribution pipe-material, length, dia etc, Quality control of all the above mentioned materials, Discharge of well, Command area created, , Feedback from the Beneficiaries etc. as per status at the time of inspection. It has to be ensured that all the essential assurances given by state govt. are being complied.

(d) Sample Size:

Random sample size of 1 to 2% of schemes for each type of wells and each type of source of energisation are to be inspected with report contain all above mentioned parameters.

(e) Schedule of Inspection:

To be mutually decided by Regional Directorate and Implementing Agency.

(e) Inspection Report:

The report should include information about all inspected aspects. It should also include the feedback of the beneficiaries including his preference/choice of Pumps-Electric Vs Solar apart from other features of the scheme, its status, quality of work being undertaken etc. It should also include few photographs. The report has to send monthly basis to the PMKSY Cell of CGWB at Faridabad

(iii) Physical Progress Monitoring:

- (a) Keeping base as milestone given in MoU, Monthly review meetings to be held with head of Implementing Agency for progress made so far.
- (b) Providing technical support including assessing the well discharge, performance of well and pumps etc. of schemes being constructed by contractor vis-a-vis CGWB wells.
- (c) Review of regular monitoring of ground water levels in project area by state govt. and data sharing with CGWB.
- (d) Coordination with the concerned state govt. department so as the project is completed within time frame.

(iv) Financial Progress Monitoring :

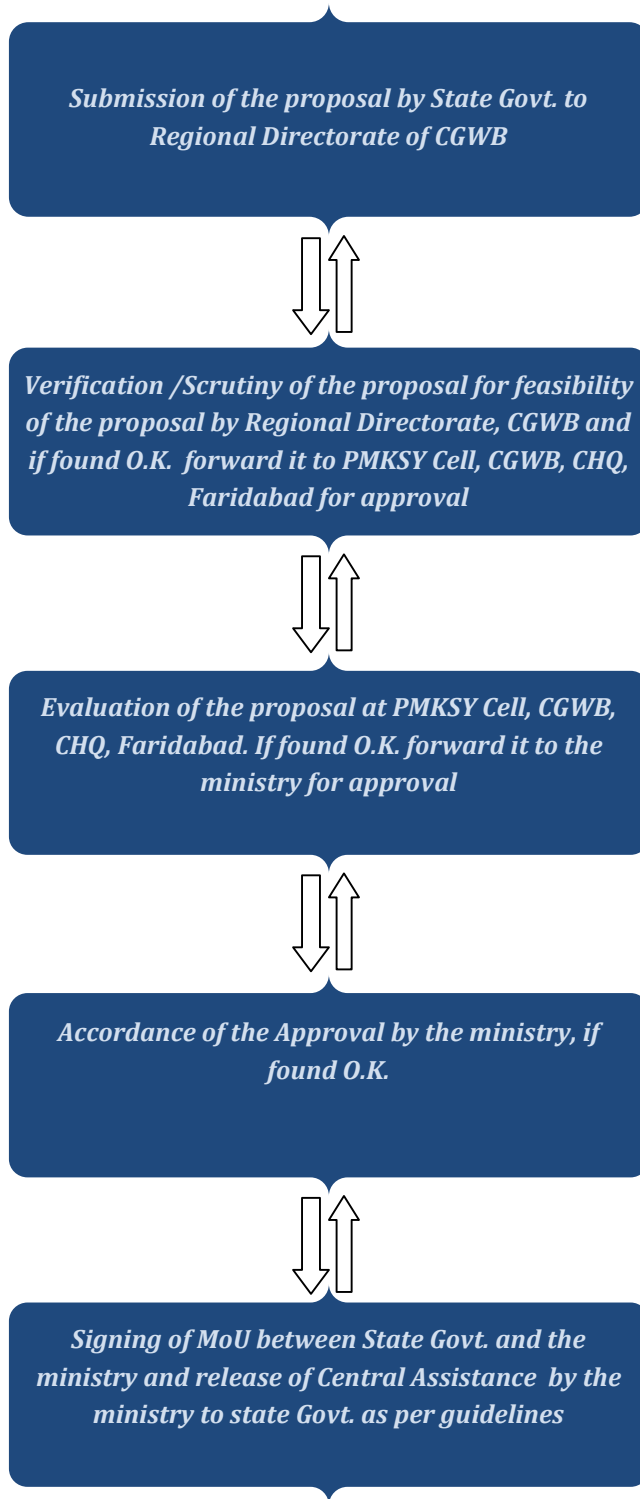
- (a) Release of funds to Implementing agency by State Government
- (b) Expenditure being made by Implementing agency
- (c) Communication for expected date for subsequent instalments of CA, \ in view of Physical and financial progress of the project.
- (d) Obtaining Physical/Financial progress from States and after validation, its submission to PMKSY cell, CGWB.

2. Monitoring at PMKSYCell, CGWB,CHQ, Faridabad

For effective monitoring of ongoing schemes at various States under PMKSY-HKGP-GW, PMKSY Cell, CHQ, Faridabad will be in coordination with State Governments and Regional Directorates of CGWB, the following activities shall be carried out:

1. Collection, analysis and data validation of all information being obtained from State Government and during inspections by Regional Directorate level.
2. Review of Physical & Financial progress of the project submitted by State Govt./Regional Directorate of CGWB. Issues to be raise to State/ RD CGWB in case of slow progress and inconsistency of data. Communicating the progress of scheme to Ministry.
3. Progress shall be evaluated in accordance with time lines agreed in MOU, fund released, construction of wells, command area created and beneficiaries etc. In case of any shortfalls, reason for shortfall to be identified and efforts to be made to resolve it.
4. Recommendations to Ministry for release of subsequent instalments of Central Assistance on the basis of work progress & expenditure time to time.
5. Coordination with Regional Director of concerned States, Chief Engineer of Implementing Agency and Ministry for effective monitoring of project.
6. Field inspections/Meeting with State Govt., Implementing Agency to be made as and when required.

Stages of Processing of Proposal :



No. T-15013/1/2018-GW

Government of India

Ministry of Water Resources, River Development & Ganga Rejuvenation
(Ground Water Section)

Shram Shakti Bhawan, Rafi Marg
New Delhi, Dated: 28.05.2019

Sub: Revision of PMKSY-HKGP-Ground Water Irrigation guidelines

Sir,

I am directed to intimate that the PMKSY-Ground Water irrigation revised operational guideline was issued by the Ministry during Nov 2018 and a copy of the same was forwarded to your State vide JS (IC&GW) DO letter number T-15013/1/2018-GW dated 07th & 14th Nov 2018.

2. It is further to intimate that based on the inputs/feedback received from certain States and also during deliberations in the PMKSY-GW workshop held at CSMRS, New Delhi on 28th Feb 2019, the operational guideline have been further modified and is attached as per **Annexure I**. The salient points of changes are attached as per **annexure-II**. This modified operational guideline supersedes all previous operational guideline issued by the Ministry in this regard.

3. This is issued with the concurrence of IFD vide their Dy. No. 96/IFD/2019-20 dated 27.05.2019 and approval of Secretary.

Yours faithfully,


(Ashish Kumar)

Director

Tele-phone No. 23716928
e-mail: gwdesk-mowr@nic.in

To

Principal Secretary,
Govt of
(As per list attached)

Copy to:

Chairman, CGWB
All Members of CGWB
All RDs of CGWB
PPS to Secretary
PPS to JS(IC&GW)
PPS to JS&FA
PPS to Commissioner, SPR
IFD

Operational Guidelines for Pradhan Mantri Krishi Sinchai Yojana (PMKSY) Har Khet Ko Pani (HKKP) - Ground Water Irrigation**1. INTRODUCTION**

PMKSY having AIBP, CAD, SMI, RRR and Ground Water components was approved by Cabinet during July, 2015 for a period from 2015-16 to 2019-20. Operational guidelines for Ground Water component were issued by the Ministry of Water Resources, RD & GR vide OM no. P-15011/24/2016-SPR/2037-2105 dated July 2016 and during November 2018. Based on the feedback received from certain State Governments and the inputs received during the PMKSY-Ground Water workshop held in CSMRS, Delhi on 28th Feb 2019, the existing provisions of the guidelines have been further revised. This supersedes all previous operational guidelines issued in connection with PMKSY-Ground Water irrigation by MoWR, RD & GR.

2. CREATION OF IRRIGATION POTENTIAL THROUGH GROUND WATER:

Creation of irrigation potential through ground water depends upon yield potential of underlying aquifers. Hence, any new construction of ground water well should be based on the data/ knowledge available for the area with the Central/ State Agencies involved in ground water development and management. The important points to be considered while planning any ground water development are as below:

- i. The scheme is not to be planned in areas classified as over-exploited, critical and semi critical areas. Further eligibility criteria have been laid down in subsequent paras.
- ii. Some of the areas have not been classified. Scheme in such unclassified areas shall be considered on case to case basis depending upon various criterions laid down in the guidelines.
- iii. Groundwater development will be carried out preferably through Dug wells, Dug Cum Bore wells in hard rock area tapping shallow aquifers and shallow/deep tube wells in alluvium areas tapping prolific aquifers. Bore wells are to be taken up in areas where hydro-geological setup and ground water aquifers justify their suitability.
- iv. Each well to be provided with electric/solar pumps for water lifting. Provision of 75% electric and 25% solar pumps may be considered for a cluster/proposal. The ratio of solar pumps may be relaxed in Tribal/LWE/ infested/difficult areas. Further, wherever electric power is not available, the whole scheme may be permitted with Solar pumps. However, the final decision in this regard shall rest with MoWR, RD & GR.
- v. Promotion and adoption of water use efficiency & conservation practices viz. drip/sprinkler, diversification to low water demand crops, promoting on-farm

rainwater harvesting etc shall be encouraged by the State Govt/ Project Authorities.

- vi. The State agencies involved in planning and execution of ground water schemes shall formulate the proposals in consultation with State Ground Water Department & CGWB duly considering nature of aquifer system in the area, spatio-temporal behaviour of water level, ground water resource availability, artificial recharge structures suitable for that area, sites for their construction etc.
- vii. To minimize the failure of wells geophysical and hydro-geological investigations may be carried out for proper site selection.

3. ELIGIBILITY CRITERIA

- i. Ground Water irrigation facility through Dug wells, Dug cum Bore wells, Tube wells and Bore wells etc. can be funded for schemes in areas other than Over-Exploited(OE), Critical or Semi-Critical meeting the following criteria:
 - a. *Less than 60 per cent of the annual replenishable groundwater resources have been developed.*
 - b. *Average annual rainfall of 750 mm or more to have availability of enough water for recharge;*
 - c. *Shallow groundwater levels within range of 15m below ground level or less during pre-Monsoon period.*

Ground water development for irrigation can be planned in such a way that after implementation of the project, stage of Ground Water Development (SOD) in an area should not exceed 70% at any time.

However, as already mentioned Scheme in unclassified areas shall be considered on case to case basis depending upon various criterions laid down in the guidelines.

- ii. The beneficiary under this scheme shall be small and marginal farmers only with priority to be given to SC/ST and Women farmers
- iii. The scheme is applicable for individual farmer, group of farmers/ cooperatives, Govt. Scheme utilising Govt. Land etc.

4. MEASURES TO PREVENT OVER-EXPLOITATION AND FACILITATE RECHARGE TO GROUND WATER

- i. Farmers will be encouraged for undertaking activities through combination of rain water harvesting and ground water extraction.
- ii. To the extent possible convergence with PMKSY-Watershed Component and MGNREGA will be made for supporting water harvesting and groundwater recharge interventions to ensure the long term ground water sustainability.

- iii. States to be advised to ensure that suitable recharge measures are taken up under NRM component of MGNREGS or any other recharge scheme in the target area of the present scheme to provide sustainability to ground water. The type of recharge interventions/ structures to be constructed will depend upon the local hydro-geomorphological condition of the area, rainfall pattern, geomorphic set up and shall be identified based on ground water conditions and other scientific studies and utilizing appropriate technology, including remote sensing studies. These activities wherever proposed and possible, may be executed with convergence of MGNREGA / other similar scheme with ground water harvesting/ conservation components.
- iv. States are advised to utilize Micro-Irrigation Fund Corpus for adoption of micro irrigation facilities in area proposed to be covered under this scheme, to the extent possible.
- v. Project Authorities/ State Government Department shall monitor ground water levels in the areas where project is implemented to ensure that the ground water development level do not exceed 70% in any of the areas. Proper monitoring and review arrangements would be put in place by Project Authorities in this regard.

5. IMPLEMENTATION MECHANISM

- i. State Government to identify potential areas where assured ground water irrigation under this scheme can be provided in consultation with CGWB and State Ground Water Department for ensuring aquifer potential, yields and sustainability.
- ii. Scheme is to be advertised at State/district/ block/Panchayat level and applications from beneficiaries shall be obtained at Panchayat/ Block level along with agreement document in case of more than one beneficiaries for one well. Formats for Individual/WUA are attached as Annexure I & II. State Governments may suitably amend these formats, in consultation with their Legal Department, as per the requirement.
- iii. The State govt shall prepare the feasibility report/DPR for Ground Water Irrigation including the cost estimates and technical details in consultation with CGWB (concerned Regional Director, CGWB). The implementing agency/line department shall take approval of State Level Technical Advisory Committee (TAC) in which the RD, CGWB shall be invited as member when such proposals are considered. Further, the proposal would be approved by State Level Sanctioning Committee (SLSC), already constituted for PMKSY ensuring that the areas proposed under the scheme are not already being irrigated through any other irrigation scheme and there is no duplicity in funding the scheme. Further, the RD, CGWB shall also be made member of SLSC.
- iv. The State Governments shall ensure that such projects/schemes should be part of DIP/SIP prepared under PMKSY.
- v. Approved proposals from SLSC will be submitted by the State Govt. to concerned Regional Director, CGWB in the prescribed format along with prescribed documents, who will forward the complete proposal with recommendations to MoWR, RD & GR.
- vi. In case of community wells participatory approach involving stakeholders shall be adopted by creating Water User Associations (WUA). The number of tube

- wells/water structures may be worked out based on the availability of ground water, hydraulic properties of aquifer, yield capacity and unit draft of wells etc.
- vii. The work under this project/ scheme shall be executed by the respective State Govt./UT Govt. For executing the work on ground necessary tendering etc shall be carried out by them as per laid down standard operating procedures/ tendering guidelines/ financial guidelines etc. as applicable in the respective States. However, States/UTs are also permitted to follow norms and conditions of the respective State/UT Governments as applicable in their similar ground water irrigation schemes. In such cases where the States/UTs are following the norms of their own schemes, the cost of the individual project shall be limited to the cost ceiling applicable in their own ground water irrigation scheme as on 01.04.2019 or in this scheme of the Ministry of Water Resources, RD & GR whichever is lesser. States shall institute suitable mechanism to oversee the work right from procurement stage to final commissioning in the most efficient and transparent manner.
 - viii. Implementation period shall be one year which can be extended with the approval of Secretary (WR, RD & GR) in case sufficient justification is provided by the State Govt.

6. COST COMPONENT

- i. In the absence of any equivalent Central Scheme norms/rates, the Standard Schedule of Rates as prescribed by the respective State/UT governments shall be used to prepare the cost of proposals. The funds shall be released for the following five components a) construction of ground water abstraction structure, b) cost of pump (Solar/ Electrical), c) water supply pipe of length upto 200m and d) investigation cost for site selection for well, e) Cost towards electric supply upto the tube well electric pump.
- ii. Maximum cost norms for different type of wells in Alluvium and Hard Rock formation, pumps (Electric/ Solar), electric supply upto tubewell electric pump, Investigation for site selection and distribution pipe etc has been worked out based on certain data received from certain States/UTs and are given below as per Table:1.
- iii. The funding for the electric supply shall be considered for transmission line (both overhead lines/aerial bunched cables/underground cables from the nearby electric sub-station), Transformer, RCC/Steel poles, LT panels with switchgear etc. The electric supply plan may be made such that a Transformer may feed a number of nearby pumps so that the average per tube-well cost reduces.

Table : 1**Maximum Cost Norms for GW structures and their ancillaries**

Sl.No.	Structure Type	Formation	Cost (Rs in Lakh)
1	Tube Well (dia 155 mm, depth upto 90)	Soft Rock	3.00
2	Dug Well (Large Dia up to 6 m depth 20 m)	Hard Rock	6.50
3	Dug-Cum Bore Well(Large Dia up to 6 m depth 40 m)	Hard Rock	7.00
4	Bore Well (dia 155 mm, depth upto 100)	Hard Rock	3.00
5	Electrical Pump with Lt panels etc up to 5 HP		0.75
6	PV Solar Pumps with LT panels etc (3 to 5 HP) As per benchmark cost of MNRE		0.77/ HP (Pan India except NE regions)
6	Solar Pumps (3 to 5 HP) As per benchmark cost of MNRE		0.85/ HP (NE regions)
7	Hydro geological and geophysical Investigation for site selection		0.28
8	Distribution Pipe (Canvas Hose Pipe) 200 m		0.20
9	Electric supply upto tube well pump from nearby electric sub-station		2.5 lakh (maximum) per tube well electric pump

- iv. The cost of structures having different specifications shall be suitably calculated on *pro-rata basis*.
- v. Costs of proposal exceeding the above mentioned cost norms (refer Table: 1) shall be absorbed by the respective State Govt from their own budgetary provisions/State share.
- vi. The assets would be created on either Government land or on the land of beneficiary/ farmer after obtaining the agreement of beneficiary/ farmer for sharing the asset with WUA. **Cost of land shall not be funded under the scheme.** The assets created through this programme shall be handed over to the beneficiary/ farmer/ Water User Associations /PRIs/State Govt. who will further periodically maintain the assets through their own resources.

7. FUNDING MECHANISM

- i. Funding pattern shall be made in the ratio of 90:10 (C:S) in case of NE/Hilly areas and 60:40 (C:S) in case of other areas.
- ii. The States need to make suitable provisions for executing the scheme in their Annual Plan proposal of each financial year. They also need to ensure necessary budgetary provisions for the same.
- iii. Administrative cost to be considered in cost estimates for establishing Water Users Associations, distribution and receiving the applications, publicity of the scheme, operational expenses at the Block, District and State level, overheads/ contingency and miscellaneous expenses will be as per the prevailing rates with overall capping of 1% of the cost of Project/ Scheme.
- iv. First installment during every year amounting to 60% of the Government of India's share (CA) as per budget provided by State shall be released on receipt of proposal from the State Govt duly approved by SLSC (PMKSY) subject to fulfillment of provisions of these guidelines. Further, first installment during the year shall be released upon receipt of utilization certificate for 90% of CA released during previous year (s) along with matching State share.
- v. Release of the second installment in a year amounting to 40% of eligible CA for the year would be considered on receipt of the following:
 - a. Utilization certificate for at least 50 percent of the funds released as first installment during the current year along with matching State share.
 - b. Performance report in terms of physical and financial achievements as well as outcomes, in specified format.
- vi. State share and Centre share releases would be considered on cumulative basis while calculating eligibility for release of CA.
- vii. State shall submit the audit statement of expenditure every year.
- viii. The State shall submit completion/closure report as the case may be on completion/foreclosure (in case of reasons beyond control) along with UC for the entire CA released for the Scheme/Project. Further, State shall get the evaluation of scheme on completion and submit report to MoWR, RD & GR.
- ix. MOU shall be signed by the State Govt. with the MoWR, RD & GR for implementation of schemes as per prescribed format.
- x. In case the State Govt. fails to comply with the agreed date for completion as per MoU and do not get extension for want of justification, then the grant component released will be treated as loan and recovered as per usual terms of recovery of the Central Loan.

8. ESSENTIAL ASSURANCES TO BE GIVEN BY STATE GOVERNMENT

Following assurances are required to be submitted by the State Government:

- i. Possibility of convergence and linkages will be explored in the districts with various schemes of Govt. Of India such as MGNREGS, PMKSY (including micro irrigation component, PDMC of Ministry of Agriculture and Farmers Welfare) etc. and schemes of State Govt.
- ii. To follow MNRE guidelines for specifications of solar pumps and explore the possibility for convergence with National Solar Mission or any other solar pumps scheme of the State, if any.
- iii. The distance between two wells (schemes) will be minimum 100 m to prevent any possibility of well interference.
- iv. The project report includes working action plan with accountability for optimal utilization of the infrastructure. The provision for support services and spares are indicated along-with source of maintenance expenditure.
- v. Water User Associations are created under MOA for schemes wherein beneficiaries are more than one farmer for one ground water well.
- vi. Measures have been taken to create requisite conjunctive Infrastructure prior to construction of wells sanctioned under the scheme.
- vii. State Govt shall submit a MoU/ Agreement between participating farmers for collective use of asset created under this scheme and for payment of electricity bill on equal sharing basis in case of proposals for creation of assets for group of farmers/ WUA.
- viii. The assets created shall be taken over after completion of works and shall be maintained by individual farmers/group of farmers/WUA/State Govt. /PRI on their own arrangements/funds.
- ix. The State/UT Government shall ensure that micro-irrigation practices are implemented in at least 30% of the proposed irrigated area in convergence with relevant scheme(s) of Central/State/UT Governments.
- x. The Geo-tagging of the projects supported under this scheme shall be ensured.

9. MONITORING MECHANISM

- i. State would make appropriate arrangements to review the monitoring of projects/ scheme implementation and submit the quarterly progress reports to Regional directorate of CGWB, MoWR, RD & GR.
- ii. Officers of Regional Directorates of CGWB shall monitor the project at least two times a year.

- iii. MoWR, RD & GR may also get the third party monitoring of schemes/ projects as may be felt necessary. Ministry may utilize upto 1.5% of CA component for third party monitoring, evaluation, IEC activities etc.
- iv. States shall provide necessary assistance to CGWB officials/ third party in carrying out such monitoring visits and also provide requisite information to them.

DRAFTJoint Agreement from beneficiary under PMKSY-HKKP (Ground Water Component) scheme of Government of IndiaJoint Agreement between Individual farmer and Govt of State (Line department)

1. I-----Name-- Father's name----- R/O
Village.....P.O.....Block.....Thana.....District.....State is
the sole owner of piece of land (agriculture land) located at Mauja....., khasra
no.....,Block.....District.....State.....and is in physical possession of this
land.
2. I have applied to State Govt of for creation of dugwell/borewell/dug-cum-
borewel/tubewell (DW/BW/DCB/TW) in my above mentioned land for irrigation
purposes under PMKSY-HKKP-Ground Water component. I shall provide the land for
creation of above structures free of cost for a period of 15 years, which may be extended
in case the structure is in serviceable condition at the same terms and conditions as
mentioned in this agreement.
3. I am aware that State Govt at their discretion may use the water extracted from the above
structures (created in my land) for the irrigation of farm lands of other farmers also. I
shall not at any point of time interfere with the decision of State Govt and their decision
in this connection shall be final and binding on me.
4. The responsibility of security of the ground water extraction structure
(TW/DW/BW/DCB) and pump etc. shall be the responsibility of mine and the assets
created will be used only for agriculture purposes. I also hereby undertake not to involve
myself in any kind of sale of groundwater extracted from the structure built on my land.
5. The facts given above are true to best of my knowledge.
6. I am aware that I shall be held responsible for violation of any clause of this agreement
and misrepresentation of facts/providing of false information etc and shall be liable for
any legal action as per the law.

First PartySignature & Name
Father's Name R/O

Second Party

Authorised Representative of line deptt, Govt of State

ANNEXURE-IIDRAFTJoint Agreement from beneficiaries (WUA) under PMKSY-HKKP (Ground Water Component) scheme of Government of IndiaJoint Agreement between farmers of Water User association (WUA) and Govt of State (Line department)

1. We following farmers hereby agree to form a Water User Association (WUA) for availing the irrigation facilities created by Govt ofunder PMKSY.
 - a. Name ----- Father's name-..... R/O
 Village.....P.O.....Block.....Thana.....District.....State

 - b. Name ----- Father's name-..... R/O
 Village.....P.O.....Block.....Thana.....District.....State

 - c.
 - d.
 - e.
2. We hereby certify that one of the member of WUA i.e. Name -----
 Father's name-
 R/O Village.....P.O.....Block.....Thana.....District..... State
 is the sole owner of piece of land (agriculture land) located at Mauja..... ,
 khasra no....., Block.....District.....State.....and is in physical possession of this land.
3. We have applied to State Govt of for creation of dugwell/borewell/dug-cum-borewell/tubewell (DW/BW/DCB/TW) in above mentioned land for irrigation purposes under PMKSY-HKKP-Ground Water component. We hereby agree that the member (of WUA) as mentioned at para 2 above shall provide the land for creation of above structures free of cost for a period of 15 years, which may be extended in case the structure is in serviceable condition at the same terms and conditions as mentioned in this agreement.
4. We are aware that State Govt at their discretion may use the water extracted from the above structures for the irrigation of farm lands of other farmers also in future. We shall not at any point of time interfere with the decision of State Govt and their decision in this connection shall be final and binding on us.
5. The responsibility of security of the ground water extraction structure (TW/DW/BW/DCB) and pump etc. shall be the responsibility of ours and the assets created will be used only for agriculture purposes. We also hereby undertake not to involve ourselves in any kind of sale of groundwater extracted from the structure built on above land.
6. The facts given above are true to best of our knowledge.

7. We are aware that we shall be held responsible for violation of any clause of this agreement and misrepresentation of facts/providing of false information etc and shall be liable for any legal action as per the law.

First Party

Signature & Name/address of
all members of WUA

Second Party

Annexure-IISalient points of changes incorporated in the operational guidelines of PMKSY-ground water irrigation

1. States/UTs have been permitted to follow norms and conditions of the respective State/UT Governments as applicable in their similar ground water irrigation schemes. In such cases where the States/UTs are following the norms of their own schemes, the cost of the individual project shall be limited to the cost ceiling applicable in their own ground water scheme as on 01.04.2019 or in this scheme of the Ministry of Water Resources, RD & GR whichever is lesser.
2. Implementation period of the scheme shall be one year.
3. Cost towards electric supply upto the tube well electric pump shall be considered in the proposal subject to a maximum ceiling of Rs 2.5 Lakh/tube-well (with electric pump).
4. The State/UT Government shall ensure that micro-irrigation practices are implemented in at least 30% of the proposed irrigated area in convergence with relevant scheme(s) of Central/State/UT Governments.
5. The Geo-tagging of the projects supported under this scheme shall be ensured.

Annexure-II

Points to be adhered /Checklist for Evaluation of Proposals in respect of PMKSY-HKGP-GW scheme

	Item	Response to be filled (Pl indicate page no. of the proposal of each response wrt each item)	Remarks. If any
	GENERAL INFORMATION		
1.	Name of the implementing agency/state department responsible for executing project, its address, contact nos, email etc.		
2.	Name & contact details of the nodal officer responsible for execution /monitoring of state department responsible for executing project, address, contact nos, email etc.		
3.	Total cost of proposal (Rs in crore)		
4.	Proposed period/duration of Implementation of the project		
5.	Total Number of farmers proposed to be benefitted Type of Farmers Marginal (SC/ST/Women/General) Small (SC/ST/Women/General) Note: i. Marginal Farmer: Farmer cultivating (as owner) agricultural land up to 1 Ha. ii. Small Farmer: Farmer cultivating (as owner) agricultural land between 1 to 2 Ha.		
6.	Number of individual farmers proposed to be benefitted		
7.	Number of farmers in cluster proposed to be benefitted		
8.	Total additional Ground water based irrigated area proposed (in ha)		
9.	Total state share committed (Rs in crore)		
10.	Total Central assistance sought (Rs in crore)		
	ELIGIBILITY CRETERIA		
11.	What is ratio of CA/SS proposed (60:40/90:10)		
12.	i. Whether Proposal / DPRs have been		

	<p>approved from STAC (Yes/No)</p> <p>ii. Whether Proposal / DPRs have been approved from SLSC (Yes/No)</p>		
13.	<p>i. Whether RD /HoO CGWB is member of SLSC (Yes/No)</p> <p>ii. Whether RD /HoO CGWB is Invited member of STAC (Yes/No)</p>		
14.	Whether minutes of SLSC meeting for approval of the proposal appended (Yes/No)		
15.	<p>Whether Project or scheme is part of DIP/SIP. (Yes/No)</p> <p>If NO reasons thereof and tentative plan for compliance.</p>		
16.	<p>i. Whether area under proposal is already being under taken in any other State/ Centrally funded irrigation scheme. If so, pl. specify</p> <p>ii. Whether area falls under command area of schemes of Major/ Medium/ GMI/SMI/Lift irrigation etc. (Yes/No)</p> <p>Note: Kindly ensure that duplicity of proposal shall be strictly avoided and certified by Nodal officers of State Govt. counter signed by RD, CGWB.</p>		
17.	<p>What is the Category of GW development as per latest GWRE (approved by state/Central Govt.)</p> <p>(OE/ Critical/ Semi-Critical/Safe/Unclassified) Pl. specify</p>		
18.	Pl. indicate Stage of Ground Water Development in percentage (as per latest approved GWRE by GOI)		
19.	<p>Expected Stage of Ground Water development after implementation of scheme (s) and enhancement of GW draft.</p> <p>Note: Post project GW Draft should not exceed 70% Stage of GW development for assessment unit. Sample computation is annexed as ready reference.</p>		
20.	Pl. indicate average Pre-monsoon ground water level for last 5 years (less than 15 mbgl)		
21.	Pl. indicate annual average rainfall of the		

	area (more than 750 mm)		
22.	Pl. indicate type of Beneficiaries (Small/Marginal farmers –Pl. specify)		
23.	Pl. indicate other category of beneficiary (SC/ST/Women/Others –Pl. specify)		
	PROPOSAL/DPRs COST COMPONENT		
24.	What are administrative costs, if any (It should not exceed 1% of the project cost)		
25.	Whether administrative costs are over and above the project cost (Yes/No)		
26.	Whether share is as per guidelines (Yes/No)		
27.	Whether Budget Provision have been made in State Budget for 2019-20 as per State share (Yes/No)		
28.	What is the amount of first release sought in the proposal (-60% of CA) Rs in crore		
29.	Whether amount sought is as per guidelines (Yes/No)		
30.	Indicate break up costs of each Component proposed a) construction of ground water abstraction structure, b) cost of pump (Solar/ Electrical), c) water supply pipe of length upto200m and d) investigation cost for site selection for well Note: Cost of each item is admissible as per Para 6 of Guidelines. Costs over and above shall have to be adsorbed by the State Government.		
31.	Whether Costs proposed are within the maximum cost norms of Operational Guidelines? (Yes/No)		
32.	In case cost exceeds the norms, whether State has given certification that Costs of proposal exceeding the cost norms (refer Table: 1 of operational Guidelines) shall be absorbed by the respective State Govt from their own budgetary provisions/State share.(Yes/No)		
33.	Whether proposal includes cost of land (pl. Specify) Note: Cost of land will not be considered for funded under the scheme by GOI.		

	PROJECT DESIGN		
34.	Hydrogeology of the area (Hard/Soft Rock)		
35.	Type of Well/ structures proposed (DW/BW/TW/DCB/Other-pl. specify)		
36.	Total number of well/structure proposed.		
37.	Whether Feasibility of Well/Structure with respect of hydrogeological setup examined?		
38.	Expected Yield / Discharge of Well (in liter/day)		
39.	Proposed Command of each Well (in ha)		
40.	Total additional command are to be irrigated including cluster, if any(in Ha)		
41.	Total command proposed area to be covered with GW irrigation after implementation		
42.	Total number of Electrical pumps proposed		
43.	Total number of Solar pumps proposed		
44.	Whether the proposal falls in Tribal/LWE/difficult (pl. specify)		
45.	Provisions for Water Use Efficiencies/ Conservation practices (Yes/No)		
46.	Percentage of Solar pumps and Electrical pumps in cluster/proposal.		
	CERTIFICATES/ASSURANCES		
47.	Whether any provisions for utilizing NRM Component of MGNREGS made? (yes/No)		
48.	Are Micro Irrigation Funds corpus proposed to be utilized?- Pl. specify		
49.	Any other effort proposed by state in regard to water use efficiency/conservation –Pl. specify		
50.	Whether proposal contains proper monitoring of ground water levels – Pl. specify		
51.	Whether Joint Agreement between Individual farmer and State Govt. (Line department) is enclosed as per format (Yes/No)		
52.	Joint Agreement between farmers of Water User association (WUA), if any and State Govt. (Line department) is enclosed as per format.(Yes/No/NA)		
53.	Whether assets created are on Government land? (Yes/No)		
54.	Compliance of assurances as per Para 8 of guidelines - Duly signed by nodal officer (Yes/No)		

55.	Certificate to be given by State Government for further maintenance after creation of structure as per Para 6(v) of Guidelines.		
56.	Has the MOU has been signed between State Government and CGWB (as authorized by MOWR) in prescribed format.		
57.	Any other relevant information – pl. specify (attach annexure , if required)		

Specific comments of RDs on number of tube wells/water structures proposed, its feasibility, based on the availability of ground water, hydraulic properties of aquifer, yield capacity and unit draft of wells etc. (pl. add separate page , if required)

(Signature of Regional director/HOO, _____ Region, CGWB, _____)

(Name & Seal of Regional director/HOO, _____ Region, CGWB, _____)

Note: The check-list with a sample calculation for preparation of a ground water irrigation proposal has been prepared with an aim to expedite the finalization of such proposals and also to reduce queries/observations at the level of approving authority. This may be taken as a guideline and the State Govt/RDs of CGWB may accordingly follow them while preparing/finalization of the proposals. In case of any discrepancy between this checklist and the provisions of the operational guidelines, the latter shall prevail.

Memorandum of Understanding (MoU) between the Ministry of Jal Shakti (MoJS), Government of India and Government of.....on completion of Ground Water Irrigation Schemes under PMKSY-HKKP-GW

1. This memorandum of understanding is made between the Ministry of Jal Shakti, Government of India and the Government offor the completion of..... Ground Water Irrigation Scheme in one year time further extendable with the aproval of Ministry of Finance, Govt. of India under the Central Assistance (CA) under PMKSY (HKKP) (Ground water component) of the Government of India with total completion period of the entire project as one year from the date of release of Central Assistance.

2. The.....Ground Water irrigation Schemes was approved by the State Technical Advisory Committee(TAC) in.....for Rs..... crore to irrigate.....ha annually. The scheme has been approved by State Level Sanctioning Committee (SLSC) in its meeting dated.....

3. According to the State Government, the latest approved estimated cost of the project is Rs.....crore at.....price level. The physical and financial details of the components to be covered under this programme are annexed. The physical target* for creation of irrigation potential will be as under:

Year of inclusion -

Irrigation potential included under PMKSY (HKKP) - Ground Water

5. The Ministry of Jal Shakti, Government of India agrees to extend Central assistance to the tune of 60%/90% (In case of North Eastern/Hilly areas) of the total Project cost of Rs.....crore for the implementation of the project in one year further extendable with the approval of Ministry of Finance, Govt. of India with total period of completion of project shall be one year from the date of release of Central Assistance subject to the following conditions:

i) The project will be completed by the Government of by.... Its completion will be informed immediately to the Ministry of Jal Shakti for deleting the project from the list of on-going projects.

ii) The State shall get the project accounts audited by CAG regularly and submit the compliance. Copies of such audit report and compliance should be submitted to this Ministry.

iii) The concerned State Government officers shall update the progress of project components on the MIS system developed by this Ministry (if any) on weekly basis (i.e. shall be updated by Monday of each week).

iv) The State Government shall ensure further maintenance of the assets created under PMKSY-HKGP-GW as per the operational guidelines dated 28 May 2019.

v) The State Government shall provide all the support to the Ministry in respect of any information required in respect of progress of project, expenditure incurred, utilization certificate in prescribed format or any other detail required by this Ministry.

vi) Expenditure incurred by the State Governments in the previous years for the project under PMKSY-HKGP-GW shall be submitted to Ministry in form of Utilization Certificate (UC) as per Form GFR-12A prescribed in GFRs 2017 duly signed by the respective competent authority, while proposing release for next installments.

vii) The release pattern will be as given in the Operational Guidelines issued by Ministry of Jal Shakti vide letter no. _____ dated 28 May 2019 . Third party monitoring of the project will also be got carried out by Central Govt. / State Govt. for ensuring timely completion of project. The State Government shall provide all the assistance required to the monitoring team in this regard.

viii) The project will be executed by the State and shall be monitored by CGWB and State Government as per the operational guidelines. Quarterly progress report in respect of the Ground Water Irrigation Schemes shall be submitted to the CGWB and Ministry of Jal Shakti by 7th January, April, July and October positively.

ix) The State Government shall ensure strengthening of existing quality control mechanism and maintain required quality control in the execution of the works. The State govt. shall also ensure that all mandatory quality control checks and mandatory inspection by supervisory officers to field laboratories has been carried out. State Govt. shall submit report of quality control whenever asked by CGWB/ Ministry of Jal Shakti.

x) The State Government shall comply to the provisions of the operational guidelines issued by Ministry of Water Resources, River Development & Ganga Rejuvenation vide letter no. dated 28 May 2019 (A copy of operational guidelines is attached).

6. The cumulative six monthly physical and financial targets is enclosed as Annexure.

Signed on the day 2019 at New Delhi.

For and on behalf of the Govt. of..... Secretary, Government of.....

For and on behalf of Government of India

Joint Secretary (IC&GW)

Ministry of Jal Shakti

FORM GFR 19-A
 [See Rule 2012 (1)] Form of
 Utilization Certificate

Sl. No.	Letter No. and date	Amount	
			Certified that out of Rs.....of grants-in-aid sanctioned during the year in favour of.....Under this Ministry/Department letter No. given in the margin and Rs.on account of unspent balance of the previous year ,a sum of Rs.....has been utilized for the purpose of..... for which it was sanctioned and that the balance of Rs.remaining unutilized at the end of the year has been surrendered to government (vide No.,dated)/ will be adjusted towards the grants-in-aid payable during the next year.....
	Total		

1. Certified that I have satisfied my self that the conditions on which the grants-in- aid was sanctioned have been duly fulfilled/are being fulfilled and that I have exercised the following checks to see that the money was actually utilized for the purpose for which it was sanctioned.

Kinds of checks exercised

- 1.
- 2.
- 3.
- 4.

Signature..... Designation.....
 Date.....