## Revised Guideline for Installation of STW under Projects – "Installation of 1 Lakh Shallow Tube Well" and "1000 Solar PV Powered STW" for Assured Irrigation under RIDF. (Revised on 27.08.2018)

A.	Introduction :-
	This Revised Guideline supersedes earlier "Guideline for Installation of Shallow Tube Well (STW) with Diesel Pump-set / Electrical Pump-set / Solar PV powered Pump-set under RIDF, 2016-17, and to be followed with effect from the date of publication. The Directorate of Agriculture will make District wise allotment of the different types of STW i.e. STW with Diesel Pump-set, Electrical Pump-set and Solar Photovoltaic Water Pumping System to create assured irrigation potential.
B.	Eligibility criteria:-
	a)(i)Group of farmers having 2.00 ha (15 bighas) of contiguous cultivable agricultural land for assured irrigation shall be eligible for admissible subsidy.  (ii)Individual farmer having 2.00 ha (15 bighas) of contiguous cultivable agricultural land for assured irrigation shall be eligible for admissible subsidy.  (iii) Farmers who do not possess 2.00 ha of contiguous cultivable land, he/she may include the adjacent cultivable agricultural land of the adjacent farmers to cover a command area of minimum 2.00 ha for assured irrigation, subject to condition that an agreement (Annexure IV (D)) will be made between the individual
	farmer and adjacent farmers for equitable distribution of water for irrigation and the leader of the group of farmers shall be eligible for admissible subsidy.  b) In case of STW with Diesel Centrifugal Pump-set/ Electrical Pump set (Surface Pump/ Submersible Pump), the installation of STW shall be installed by the beneficiary from their own or through the empanelled Contractor as per approved plan, estimate & specification. Subsidy for the component will be reimbursed as per provision as stated in Annexure-I to implementing Agency.
	c) In case of STW with Electrical Pump-set in cluster of 10 Nos. with 25 KVA Sub-station and in cluster of 30 Nos. with 63 KVA Sub-station, the area of cultivable land should be 10-30 hectare and 30-60 hectare respectively and the total area must be a contiguous cultivable agricultural land. d) In case of Solar Photovoltaic Water Pumping System of Surface pump (2HP) and Submersible Pump (2HP) a premium of Rs 10,000/- as advance payment (part of the farmers share), payable to supplier of SPV pumping
	system, in the form of Bank Draft drawn in favour of the supplier will be deposited to EE(A)/AEE(A) of the District by the beneficiary along with the application.  e) A premium of Rs 2,500/- (Two Thousand Five Hundred only) for each STW in a cluster shall be deposited by each participating beneficiary in the form of Fixed Deposit / NSC/ Call Deposit drawn in favour of self and pledged in favour of EE(Agri.) / AEE(Agri.) of the District along with application (as security deposit).  f) The premium deposited against cluster of STW shall be refunded to the beneficiaries after two years from the date of commissioning of cluster STW & Sub-station.
	g) The power drawn from the 25 KVA or 63 KVA sub-station by the cluster shall be utilised exclusively for agriculture purpose only. No diversion of power or use otherwise shall be permitted. Premium amount deposited by the participating beneficiaries in a cluster shall be forfeited in case of diversion of power by any of the beneficiaries of the cluster.
	h) For the provision of 25KVA and 63KVA sub-station, beneficiaries having 20 Ha contiguous cultivable land and beneficiaries having 60 Ha contiguous cultivable land would submit applications in group for the respective provision with a cover letter in plain paper jointly signed by the applicants.  i) In case of Solar Photovoltaic Water Pumping System consisting of Surface Pump (2HP), farmer's share i.e.
	15% of cost of SPV Pumping system of Rs 1,87,489.00 amounting to Rs.28,123/- (including premium of Rs 10,000/- already deposited along with the application)in the form of bank draft, drawn in favour of supplier, will be deposited to the District Engineer (as per Annexure-III).
	j) In case of Solar Photovoltaic Water Pumping System consisting of Submersible Pump (2HP), farmer's share (i.e. 15 % of cost of SPV Pumping system of Rs 2,09,449.00) amounting to Rs. 31,417/- (including premium of Rs 10,000/- already deposited along with the application) in the form of bank draft, drawn in favour of

k) In case of STW with Solar Photovoltaic Water Pumping System, the installation of STW and construction of water storage tank of 10000 litre capacity (RCC/Brick) shall be done by the beneficiaries from their own resources or by the empanelled contractor, as per approved plan and estimate. Subsidy for the same will be reimbursed as per provision as stated in Annexure-I and as per norms of empanelled Contractor stated at Clause I. However, construction of water storage tank is optional.

#### C i) Admissible Subsidy as per Annexure I

#### ii) Additional Provision for installation of STW on Cluster Basis

SN	Available Provisions	Funding Pattern		
		Amount as per provision	Beyond Provision	
1.	Provision of 25 KVA Sub-station for Cluster of 10 Nos. STW with Electrical Pump-set	Rs.2,21,553/-	Excess amount (i.e estimated cost of APDCL	
2.	Provision of 63 KVA Sub-station for Cluster of 30 Nos. STW with Electrical Pump-set	Rs.2,75,353/-	<ul> <li>amount as per provision), beyond the</li> </ul>	
3.	Provision for connection of 3 Phase 11 KV Line with PSC Pole & ACSR Raccoon Conductor etc. up to 1Km from the last point of existing electrical power source to newly installed substation in addition to Provision at Sl.1 or Sl.2 as per site specific need.	Rs.7,80,235/-	provision shall be deposited by the beneficiaries of the cluster to APDCL in advance (as per Annexure IIIA).	

#### D. Application process :-

The application form (Annexure-II) for STW shall be available with the EE(A) / AEE(A) / NGO of the District. Guideline, Application form etc. are available in the web site www.agri-horti.assam.gov.in.

The District NGO shall collect duly filled application forms along with related documents and premium (bank draft) etc. duly verified by AEA and JE concern. The ADO will check and forward the application to the EE(A) / AEE(A) of the respective district (to be called here-in-after as **District Engineer**) for placing before District Level selection Committee (DLSC). District NGO will assist the farmers in filling up the form.

#### E. Selection of Beneficiaries :-

The District Engineer will prepare a list of beneficiaries on first come first serve basis and place the same before the DLSC. The DLSC will select the list of beneficiaries eligible on the basis of clause 'B' (eligible criteria) for availing subsidy for installation of STW with Diesel Pump set/Electrical Pump-set/ SPV Pumping system.

#### F. District Level Selection Committee (DLSC) :-

A District Level Selection Committee (DLSC), notified by Gove vide No: AGA 87/2017/199 Dated 6<sup>th</sup> June 2018comprising the following members shall be constituted –

1) Deputy Commissioner of District	Chairman	
2) Additional Deputy Commissioner (Development)	Member	
3) District Agricultural Officer (DAO)	Member	
4) District Manager of NABARD	Member	
5) Two (2) members from Farmer's Community of respective District to be nominated by DAO	Member	
6) Executive Engineer (Agriculture)	Member Secretary	
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The list of the selected beneficiaries along with minutes of DLSC will be displayed in the Notice Board of the office of the EE(A)/ AEE(A) and DAO of the district and shall be uploaded in the website www.agri-horti.assam.gov.in.

#### G. Role of District NGO:-

To facilitate community/ beneficiary participation and smooth implementation, one NGO is engaged in each District for following activities -



- NGOs will work in close coordination with the office of the District Engineer. The District Engineer will
  monitor the activities of the NGOs under their respective districts and report to the Director of Agriculture,
  Assam and Chief Engineer, Agriculture, Assam.
- ii) To help in disseminating project information amongst the Farmers/ Farmers Group.
- iii) To help in organizing district/block/village level awareness/training/orientation on various issues of the project including technical, environmental and social.
- iv) To make aware the farmers and collect applications for STWs from intending beneficiaries and submit to the respective District Engineer.
- v) To help the participating Farmers /Farmers Group in filling up the application form, keep liaison between DDM, NABARD and lead bank manager and interact with the appropriate authority on arrangement of required documents, receiving bank loan etc.
- vi) To aware the farmers for optimum use of irrigation water.
- vii) To ensure effective project documentation and maintenance of STWs by the Farmer / Farmers groups.
- viii) To record GPS readings of newly installed STWs in the prescribed formats.
- ix) To collect water samples for chemical testing from the sites and delivered to the designated testing laboratory as per requirement and direction of the implementing office in prescribed format.
- x) Any other related activities in the implementation of the project.
- xi) Before submission of the application to EE(A)/AEE(A) of the District, the NGO will contact to AEA and ADO for verification and for their signature.
- xii) The NGO will submit the bill along with activities done for payment of remuneration per month as per TOR accepted by the Govt. to the EE(A)/ AEE(A) of the District (details of remuneration shown below)
- xiii) Remuneration (claimed format at Statement-C/D)

Sl.No.	Particulars.	Unit.	Rate.
1.	Applications collected approved by DLSC of the District (complete as per directions)	Each	Rs.165.00
2.	GPS reading including mobility, awareness (complete as per directions)	Each	Rs.30.00
3.	Collection of water sample and deposition at designated laboratories for testing (arsenic, fluoride etc complete as per directions)	Each	Rs.18.75
4.	Remuneration to NGO for awareness camp, mobility, collection of application etc. (complete as per directions)	Month	Rs.15000.00

#### H. Installation of STW and construction of water storage tank by beneficiary :-

The District Engineer, on receipt of approved list from DLSC, shall issue a sanction order as per format in Annexure-III in favour of the selected beneficiary after obtaining an undertaking as per format at Annexure-IV from the beneficiary and allow the beneficiary to proceed for installation of the STW and construction of water storage tank.

In case of applications received for installation of STW with Electrical Pump-set in a cluster of 10 nos.(20 Ha contiguous cultivable Land)) or 30 nos.(60 Ha contiguous cultivable land)) of STW, the District Engineer shall issue a specific sanction order as per format (Annexure-III-A) indicating provisions allowed (i.e. 25KVA substation / 63KVA sub-station / Connection of 3 Phase 11 KV Line) on the strength of Estimate & Demand Note received from APDCL. The District Engineer will obtain an undertaking as per format at Annexure-IV-A from the beneficiaries.

Prior to installation of STW and construction of water storage tank, the District Engineer will ensure that the Arsenic & Fluoride contamination in ground water is within permissible limit (enclosed Annexure-X). The ground water test report of PHE or any other Govt. Department may be consulted. List of Blocks identified having Arsenic & Fluoride affected ground water is uploaded in the website: www.agri-horti.assam.gov.in.



The installation of STW and construction of water storage tank (optional) to be done by the beneficiary themselves under the supervision of technical staff of respective District Engineer. Materials required for boring of STW and construction of storage tank shall be procured by the beneficiary themselves from the open market as per specification laid down in the approved Model Estimates with Drawings and Litholog etc enclosed at Annexure-IX-A, Annexure-IX-B, Annexure-IX-C, Annexure-IX-D, Annexure-IX-E & Litho Log. While procuring STW materials, the farmer shall collect tax invoice from the shop and submit to the district Engineer as supporting documents for preparation of bill.

#### I. Empanelment of contractor for installation of STW and construction of water storage tank

- i) The Agriculture Department will invite Expression of Interest (EOI) from eligible contractor of Agriculture Department and other line Department for engagement for the purpose of installation of STW and construction of storage tank as per provision and estimate to ensure speedy implementation, maintaining quality, standard and uniformity.
- ii) The District Engineer will engage contractors for installation of STW and construction of water storage tank as per departmental procedure and the list of empanelled contractor for each district will be published.
- iii)For engaging a contractor shall be optional for the beneficiary.
- iv) The District Engineer will engage contractor for the purpose as per choice of beneficiary and would invite the contractor to execute the work in the field of beneficiary concerned.
- v) The beneficiaries opted for engagement of contractor would deposit 50% beneficiary's share as per provision of estimate for installation of STW and 15% beneficiary's share as per provision of estimate for construction of water storage tank in the form of bank draft drawn in favour of the empanelled contractor, engaged for the job, on receipt of sanction order of STW and water storage tank, as the case may be, accorded by the District Engineer. The beneficiary will borne the cost of contractor's margin i.e. 10% of Bill value over and above the admissible subsidy in each case.
- vi) The District Engineer will issue work order (Annexure : IVC) in favour of the empanelled contractor on receipt of beneficiary's share and 10% contactor profit and after obtaining undertaking as per Annexure IVB for empanelled contractor.
- vii) The beneficiary's share deposited for installation of STW and construction of water storage tank shall be adjusted by the district Engineer in the 1<sup>st</sup>& final bill prepared against the respective work and will reflect in the claim submitted for release of Govt. share. The first and final bill will be prepared as per approved plan and estimate (the estimated amount is inclusive of all taxes).
- viii) The admissible Govt. subsidy for installation of STW and construction of water storage tank, as the case may be, executed through empanelled contractor shall be released directly to the contractor through RTGS.

#### J. Procurement of Pump-set for STW:-

#### i) Procurement of Diesel, Electrical and SPV Pump-set:-

On receipt of beneficiary share as per Annexure III, District Engineers will intimate the Supplier by issue copy of the sanction order of the category of Diesel / Electrical Pump set to deliver to the beneficiaries concerned with an intimation to the Chief Engineer, Agriculture. Name of consignee, details of beneficiary, location for installation, completion time etc. shall be specified in supply order.

- ii) Sum total of quantity of Diesel, Electrical and SPV pumping systems for which work order has been placed by the District Engineers shall not exceed the quantity at any point of time for which contract agreement executed by the Supplier and Performance Bank Guarantee pledged..
- iii) During layout of site for STW with SPV Pumping System, the field engineer should maintain a distance of maximum 6m between the bore hole and SPV panel for efficient discharge and also the SPV panel should be installed in a shadow free area.
- iv) Scope of work as agreed by vendor of Solar Photovoltaic Pumping System is enclosed at Annexure-VIII

#### K. Disbursement of Subsidy:-

i) For installation of STW including boring materials and construction of water storage tank: (RCC/Brick)



On completion of installation of STW and Water storage tank, the District Engineer will submit claim as per format at Annexure A(i)/ A(ii)/ B (i)/ B(ii) for release of admissible subsidy through RTGS in favour of the :-

- I) Beneficiary (s) who have installed the STW and constructed water storage tank, as the case may be, from his
- II) Empanelled contractor as per choice of beneficiaries, entrusted by the District Engineer for installation of
- III) 1st & Final Bill will be prepared by the District Engineer and will record the measurement in MB against installation of each STW and construction of Water storage tank. The Bill and MB along with all relevant documents will be retained by the District Engineer for future verification and audit etc.
- IV) Compiled list of beneficiaries with address, Bank Account No, Bank Branch, IFS Code along with the name of contractor engaged in respect of the beneficiary with their bank particulars in Excel file (soft copy/ as per statement A(i)/A(ii)/B(i)/B(ii) as applicable) will be submitted to the Chief Engineer, Agriculture by the

# ii) For Diesel / Electrical Centrifugal Pump-set and Electrical Submersible Pump-set and Solar PV pump

(a)In case of Pump-set procured by the beneficiary's own financial resources directly, the district engineer will sets (direct procurement by beneficiary):prepare the first and final bill and MB, subsidy claim format A(i) for procured pumpset along with STW installed on the basis of following documents submitted by the farmer.

- a) Tax-invoice & delivery Challan of Pump-set signed by the beneficiary and countersigned by the
- b) Physical Verification & GPS reading for Installation of STW as per (Annexure-V).
- c) Photograph of beneficiary with the Pump-set and installed STW duly certified by the District

The District engineer will submit he Compiled list of beneficiaries with proper address, showing details of brand, model, price of the Pump-set, Bank Account No, Bank Branch, IFS Code in Excel file

On receipt of the statement A(i) the subsidy of the pumpset along with subsidy of installation of STW will be released to the beneficiary account directly observing the laid down procedure of DBT. The original documents shall be retained by the District Engineer for future verification and Audit.

## iii) For Diesel pumpset/ Electrical pumpset/ Solar Photovoltaic Water Pumping System:-

## a) Payment of beneficiary share as mobilisation advance:

Beneficiary shall deposit their share as per sanction accorded by the District Engineer, in the form of bank draft drawn in favour of the respective Supplier / Contractor, to the District Engineer. After delivery of Diesel pumpset/ Electrical pumpset/ placing of system components of SPV pumpsets at the site of beneficiary and on receipt of confirmation about the same, the District Engineers will release the beneficiary's shares as mobilisation advance to the Supplier / Contractors against which work order has been placed with an intimation to the Chief Engineer, Agriculture.

## b) Payment of Govt. share (subsidy) as Final payment:

For releasing of Govt. share (subsidy) to the Supplier / Contractor against supply and commissioning of the Diesel/ Electrical pump set or SPV pumping system, the Supplier/ Contractor shall produce the following documents to the respective District Engineers for preparation of bill, MB and statement A(i)/ A(ii)/ B (i)/

- a) Tax Invoice in triplicate along with delivery challan for installation of STW materials/ Water storage tank materials/ Diesel pumpset/ Electrical pumpset/ SPV Pumping system.
- Physical Verification Report (Annexure-V) jointly signed by Supplier/ Contractor, respective District



- Engineer and the beneficiary,
- c) Coloured photograph(s) of SPV array, pump, controller/ inverter, Diesel/Electrical pump set, as the case may be, along with STW duly certified by the respective District Engineer,
- d) Handing over certificate of the Diesel/ Electrical/SPV pumping system to the beneficiary jointly signed by the beneficiary and Supplier/ Contractor and countersigned by the respective District Engineer.
- e) Performance report based on data received from remote monitoring system or data logger, in cases where internet services are not available (In case of SPV pumping system).
- f) Certificate from any license holder Contractor/ supervisor, certifying that all electrical works are carried out in accordance with applicable electrical safety standards prescribed by APDCL/ Govt. Of Assam (In case of SPV pumping system).
- g) Certificate for civil work (such as installation of mounting structure for SPV etc.) certified by the District Engineers.
- h) The District Engineer will submit list of documents along with Claim for release of subsidy vide statement A(i)/ A(ii)/ B (i)/ B(ii) to the Chief Engineer, Agriculture, to release the subsidy to the supplier as per procedure.

District Engineer will retain the original documents viz. bill, MB, Tax invoice etc. in his office for future verification, audit etc.

### iv) Release of fund for the provision of 25 KVA Sub-station, 63 KVA Sub-station and Connection of 3 Phase 11 KV Line (as per site specific need) for cluster STW:-

Actual amount will be disbursed by the Agriculture Department to the APDCL as per Estimate submitted by APDCL, after deduction of excess amount beyond the provision paid in advance by the beneficiaries, if any. The fund will be deposited to the office of the APDCL concerned on submission of the following documents by the District Engineer to the Chief Engineer Agriculture, Assam.

- a) Copy of specific Sanction order of Cluster STW showing Provisions from the District Engineer;
- b) Copy of Provisional Sanction with Estimate & Demand Note from APDCL;
- Copy of money receipt against deposit of advance payment to APDCL for the Provisions by the applicants;
- d) Agreement between District Engineer & APDCL (as per standard format of APDCL)
- e) Copy of undertaking submitted by the beneficiaries of cluster as per format at Annexure-IVA.
- f) A certificate from the District Engineer on completion of installation of STWs and procurement of Pump-sets under cluster.

#### L. Credit Linking:-

In case of beneficiary opted for installation of STW with Diesel/Electrical/ SPV pump through bank loan, the District Engineer shall send a proposal against total project cost including cost of installation of STW and cost of Pump-set, to the bank branch indicated by the beneficiary along with the following documents -

- a) Guideline of the scheme
- b) Sanction Order from District Engineer
- c) Copy of application form submitted by the beneficiary
- d) Quotation for Pump-set proposed to procure by the beneficiary
- e) Approved estimate for installation of STW
- f) Copy of undertaking from beneficiary as per format at Annexure-IV/IVA (as applicable).
- g) In case of beneficiary install STW on his own and supplier supply the pump set, the loan amount will be equal to cost of STW + farmers share for Diesel/ Electrical pump set (as applicable). The subsidy of the pump set will be disbursed to supplier.
- h) In case of STW installed by empanelled contractor, will and supplier supply the Diesel/ Electrical pump set, the loan amount will be farmers share of STW + farmers share of Diesel/ Electrical pump set (as applicable).

In case of beneficiary opted for installation of STW with SPV Pumping system through bank loan, the District Engineer shall send a proposal against cost of installation of STW, cost of construction of water storage tank



and beneficiary's share for SPV Pumping system (as the case may be) to the bank branch indicated by the beneficiary along with the following documents a) Guideline of the scheme b) Sanction Order from District Engineer c) Copy of application form submitted by the beneficiary d) Approved estimate for installation of STW e) Approved estimate for construction of water storage tank (optional) f) Copy of undertaking from beneficiary as per format at Annexure-IV g) In case of beneficiary install STW and construction of Water Storage Tank(optional) on his own and supplier supply the SPV pumpset, the loan amount will be equal to cost of STW+ cost of Water Storage Tank (optional) + farmers share for SPV pump set. The subsidy of the SPV pump set will be disbursed to supplier. h) In case of engagement of empanelled contractor for installation of STW, for construction of Water Storage Tank(optional) and supplier supply the SPV pump set, the loan amount will be farmers share of STW + farmers share of SPV pump set+ Farmer's share for construction of water storage tank. The respective bank branch would consider the proposal as per laid down procedure and issue loan sanction order with a copy to the District Engineer. Bank branch will submit claim for reimbursement of subsidy to the Director of Agriculture through respective District Engineer as per format enclosed at Annexure VI. On receipt of claim from the Bank, the eligible subsidy will be transferred to the bank in favour of the beneficiary observing necessary formalities to be followed in DBT system. Utilization of STW:-For optimum utilization of Irrigation potential created, the ADO, Agriculture Extension Assistant would prepare crop plan for each STW and Irrigation plan for each crop. Water utilization and crop production report shall be prepared by the DAO. **Duration of Service:**a) In case of STW with Diesel / Electrical Pump-set the duration of service for STW & Pump-set is 10 years from the date of commissioning. b) In case of STW with Solar Photovoltaic Water Pumping System the duration of service for STW & Pumpset is 10 years and Solar Photovoltaic system is 20 years from the date of commissioning.

#### N.

M.

#### 0. Monitoring & Evaluation :-

- Monitoring of the scheme would be done periodically by the Departmental officers as well as Third party may be engaged by the Department.
- ii) Within 15 days of release of subsidy, uploading of beneficiaries' data and Geo-tagging of every STW in Departmental website and 'Bhuvan' Platform shall be carried out. District NGO shall assist in this regard. Beneficiaries' data in Excel file & hard copies shall be made available for the same purpose by the District Engineer.
- iii) Water samples testing of each STW shall be done in the designated testing laboratory. District NGO monitored by District Engineer shall play their role in this regard.
- iv) The District Engineer shall properly maintain a Record Keeping Register of STW with Diesel/ Electrical Pump-set / SPV Pumping system recording Engine No., Pump No., Serial No., beneficiaries' name & address etc. as per format at Annexure-VII.
- v) The operation & maintenance of the STW & Pump-set shall be done by the beneficiary. The beneficiary shall clean the PV panels on weekly basis so that the performance of the solar panels remains optimum. The cost of maintenance of the Pump-sets is to be borne by the beneficiary.



- vi) During the life time (duration of service) of the Pump-set/ SPV system, beneficiary shall not sell or transfer the Pump-set/ SPV system to any other party. In case the beneficiary without written approval of the Agriculture Department sells the Pump-set/ SPV system, appropriate legal action would be initiated against
- vii) Beneficiary shall be responsible for any damage, loss and theft of the Pump-set, SPV system including
- viii) Officials of Agriculture Department or any other Agency / Officials, as authorized, shall inspect the STW at any time to ensure its utilization. Log Book and the Cultivation Register duly maintained by the beneficiary shall be open for verification by the Officials.

ix) In case of any dispute related to the scheme, the Director of Agriculture shall resolve the issue amicably.

Director of Agriculture,

Assam, Khanapara, Guwahati-22

Chief Engineer, Agriculture, Assam, Khanapara, Guwahati-22