# Revised in2020-21

# SUB-MISSION ON AGRICULTURAL MECHANIZATION

## **OPERATIONAL GUIDELINES**



### **Government of India**

Ministry of Agriculture and Farmers Welfare

Department of Agriculture, Cooperation & Farmers Welfare

(Mechanization & Technology Division)

KrishiBhawan, New Delhi-110001

(Revised in2020-21)

TABLE OF CONTENTS				
S.N. Contents				
1.0	Introduction	Page No.		
2.0	Mission Objectives	1		
3.0	Mission strategy	2		
4.0	Mission Components	2		
5.0	Position of ongoing schemes	3		
6.0	Mission Structure	3		
6.1	National level	3		
6.2	Executive Committee	4		
6.3	State Level	5		
6.4	District level	7		
6.5	Role of Panchayati Raj	9		
7.0	Procedure for Approvals and Fund Flow Mechanism	9		
7.1	AAP Submission	9		
8.0	Monitoring	10		
9.0	Impact Assessment, Periodic Evaluation and Reporting	11		
10.0	Expected Outcomes	11		
11.0	Interventions	11		
11.1	Central Sector Components	11		
11.1.1	Implementing Agencies for Central Sector Components	12		
11.1.2	Training	13		
11.1.3	Testing	17		
11.1.4		20		
11.1.5	11.1.5 Establishment of Post-Harvest Technology			
11.2				
11.2.1 Financial Assistance for Procurement of Agriculture Machinery		24		
	& Equipment			
11.2.2		24		
11.2.3		27		
11.2.4	C	29		
	Assistance for Mechanized Operations	30		
11.2.6		30		
	Eastern			
11.2.7	Exposure visits	31		
12.0	Central Project Monitoring Unit (CPMU) for Monitoring of SMAM	31		
13.0	Activity Mapping	32		
Annexure-I	Activity Mapping for effective devolution of funds, functions and	33		
	functionaries under Sub Mission on Agricultural Mechanization			
Annexure-II	Cost Norms and Pattern of Assistance under Sub Mission on	35		
Annexure-II (a)	Agricultural Mechanization (SMAM) During 12 <sup>th</sup> Plan  Promotion and Strengthening of Agricultural Mechanization through	35		
milicaule-ii (a)	Training, Testing and Demonstration	55		
Annexure-II (b)	Demonstration, Training and Distribution of Post-Harvest	36		
	Technology and Management (PHTM)			
Annexure-II (c)	Financial Assistance for Procurement of Agriculture Machinery and Equipment	37		

Annexure-II (d)	Establish Farm Machinery Banks for Custom Hiring			
Annexure-II (e)	Establish Hi-Tech, High Productive Equipment Hub for Custom Hiring			
Annexure-II (f)	Promotion of Farm Mechanization in Selected Villages	61		
Annexure-II (g)	Financial Assistance for Promotion of Mechanized Operations/hectare Carried out Through Custom Hiring Centres			
Annexure-II (h)	Promotion of Farm Machinery and Equipment in North-Eastern Region	62		
Annexure-III	Formula to Calculate Farm Power Availability			
Annexure-IV	List of Training Programmes conducted at Farm Machinery Training & Testing Institutes			
Annexure-V	List of institutions approved by Department of Agriculture & Cooperation, Ministry of Agriculture for Testing and Certifying Agricultural Machineries and Equipments			
Annexure-VI	Testing Charges	70		
Annexure-VII	Format for Annual Action Plan			
Annexure-VIII	Form of Utilization Certificate			
Annexure-IX	Format for Quarterly /Annual Progress Report			
Annexure-X	Educational Qualification			
Annexure-XI	Sample Sheet of Project Cost Calculation	85		

#### **ABBREVIATIONS**

AAP	Annual Action Plan		
A&C	Agriculture & Cooperation		
ADC	Additional Commissioner		
ADG	Assistant Director General		
ADM	Additional District Magistrate		
AICRP	All India Coordinated Research Project		
ATMA	Agricultural Technology Management Agency		
BIS	Bureau of Indian Standards		
CCEA	Cabinet Committee on Economic Affairs		
CFMTTI	Central Farm Machinery Training & Testing Institute		
CHC	Custom Hiring Centers		
CIPHET	Central Institute of Post-Harvest Engineering & Technology		
CMVR	Central Motor Vehicle Rules		
CSAM	Centre for Sustainable Agricultural Mechanization		
CSIR	Council of Scientific and Industrial Research		
DAC&FW	Department of Agriculture, Cooperation& Farmers Welfare		
DC	Deputy Commissioner		
DD(A)	Deputy Director (Agriculture)		
DDG	Deputy Director General		
DLEC	District Level Executive Committee		
EC	Executive Committee		
EE(A)	Executive Engineer (Agriculture)		
EFC	Expenditure Finance Committee		
FMTTI	Farm Machinery Training & Testing Institute		
FPO	Farmer Producer Organization		
GFR	General Financial Rules		
GOI	Government of India		
ha	Hectare		
HP	Horse Power		
ICAR	Indian Council of Agricultural Research		
ICRISAT	International Crop Research Institute for Semi-Arid Tropics		
ICT	Information Communication Technology		
IRRI	International Rice Research Institute		
JD(A)	Joint Director (Agriculture)		
JICA	Japan International Cooperation Agency		
kW kW	Krishi Vigyan Kendra Kilo-Watt		
M&T	Mechanization & Technology		
MIDH	Mission for Integrated Development of Horticulture		
MIP	Mission Integration Planning		
MIS	Management Information System		
NABARD	National Bank for Agriculture & Rural Development		
NERFMTTI	North Eastern Region Farm Machinery Training & Testing Institute		
SMAM	National Food Security Mission		

NIAE	National Institute of Agricultural Engineering		
NMOOP	National Mission on Oil Seeds & Oil Palms		
NRFMTTI	Northern Region Farm Machinery Training & Testing Institute		
NSC	National Steering Committee		
PHT	Post-Harvest Technology		
PHTM	Post-Harvest Technology & Management		
PPP	Public Private Partnership		
PRI	Panchayati Raj Institutions		
PSU	Public Sector Undertaking		
PTO	Power Take Off		
QPR	Quarterly Progress Report		
R&D	Research & Development		
RKVY	Rashtriya Krishi Vikas Yojana		
SAU	State Agricultural University		
SC	Scheduled Caste		
SFAC	Small Farmers Agri-Business Consortium		
SHG	Self Help Groups		
SLEC	State Level Executive Committee		
SMAM	Sub-Mission on Agricultural Mechanization		
SRFMTTI	Southern Region Farm Machinery Training & Testing Institute		
ST	Schedule Tribes		
TSP	Tribal Sub Plan		
UG	User Groups		
UT	Union Territory		
WD	Wheel Drive		

# SUB-MISSION ON AGRICULTURAL MECHANIZATION OPERATIONAL GUIDELINES

#### 1.0 Introduction

- (i) Agricultural land area in the world has limit, but the demand for food is ever increasing due to population growth. To increase productivity in the limited land so as to meet the expanding demand arising from population growth as well as higher income is very important mission.
- (ii) The task assumes greater importance to India, than the rest of the world considering that India accounts for 2.4% of the world's geographical area and 4% of its water resources, but has to support 17% of the world's human population and 15% of the livestock.
- (iii) To increase productivity, timely and precise field work is necessary. To make it possible, agricultural machines take an important role.
- (iv) Among the states, farm power availability in Punjab, Haryana, Western Uttar Pradesh and western part of Rajasthan is higher than the National average of 2.02 kW/ha. In rest of the country, especially in Eastern and North-East Regions, it is significantly lower which necessities promotion of farm mechanization as a special Mission.
- (v) Sub Mission on Agricultural Mechanization (SMAM) will be implemented in accordance with guidelines described hereunder.
- (vi) The scheme will be implemented in all the states, to promote the usage of farm mechanization and increase the ratio of farm power to cultivable unit area up to 2.5 kW/ha.
- (vii) SMAM will have Central Sector Schemes under component No.1& 2 in which Government of India contributes 100%. Centrally Sponsored Schemes are covered under component No.3 to 8 including Administrative and Flexi fundsin which Government of India contributes 60% and states contribute 40% except North eastern states and Himalayan regions states where it is 90 % (Central Share) and 10% (State Share). For Union Territories, it is 100% centre share.

## 2.0 Mission Objectives

The Mission objectives are as follows:

- (i) Increasing the reach of farm mechanization to small and marginal farmers and to the regions where availability of farm power is low;
- (ii) Promoting 'Custom Hiring Centres'to offset the adverse economies of scale arising due to small landholding and high cost of individual ownership;
- (iii) Creating hubs for hi-tech& high value farmequipments;

- (iv) Creating awareness among stakeholders through demonstration and capacity building activities;
- (v) Ensuring performance testing and certification at designated testing centers located all over the country.

#### 3.0 Mission Strategy

To achieve the above objectives, the Mission will adopt the following strategies:

- (i) Conduct performance testing for various farm machineries and equipments at the four Farm Machinery Training and Testing Institutes (FMTTIs), designated State Agricultural Universities (SAUs) and ICAR institutions;
- (ii) Promote farm mechanization among stakeholders by way of onfield and off-field training and demonstrations.
- (iii) Provide financial assistance to farmers for procurement of farm machinery and implements
- (iv) Establish custom hiring centres of location and crop specific farm machinery and implements
- (v) Provide financial assistance to small and marginal farmers for hiring machinery and implements in low mechanized regions.

#### 4.0 Mission Components

- **4.1 Promotion and Strengthening of Agricultural Mechanization through Training, Testing and Demonstration:** Aims to ensure performance testing of agricultural machinery and equipment, capacity building of farmers & end users and promoting farm mechanization through demonstrations.
- **4.2 Demonstration, Training and Distribution of Post-Harvest Technology and Management (PHTM):** Aims atpopularizing technology for primary processing, value addition, low cost scientific storage/transport and the crop by-product managementthrough demonstrations, capacity building of farmers and end users. Provide financial assistance for establishing PHT units.
- **4.3 Financial Assistance for Procurement of Agriculture Machinery and Equipment:** Promotes ownership of variousagricultural machinery & equipments as per norms of assistance.
- **4.4 Establish Farm Machinery Banks for Custom Hiring:** Provides suitable financial assistance to establishFarm Machinery Banks for Custom Hiring for appropriate locations and crops.

- **4.5 Establish Hi-Tech, High Productive Equipment Hub for Custom Hiring:** Provides financial assistance to set uphi-tech machinery hubs for high value crops like sugarcane, cotton etc.
- **4.6 Promotion of Farm Mechanization in Selected Villages:** Provides financial assistance to promote appropriate technologies and to set up Farm Machinery Banks in identified villages in the states.
- **4.7 Financial Assistance for Promotion of Mechanized Operations/hectare Carried out Through Custom Hiring Centres:** Providesfinancial assistance on per hectare basis to the beneficiaries hiring machinery/equipmentsfrom custom hiring centres in low mechanized areas.
- **4.8 Promotion of Farm Machinery and Equipment in North-Eastern Region:**Extends financial assistance to beneficiaries in high-potential but low mechanised states of north-east.

#### 5.0 POSITION OF ONGOING SCHEMES

FarmMechanizationprogrammes are also being implemented through other missions/schemes such as RKVY, MIDH, NMOOP&SMAM, which would continue to be implemented subject to these guidelines. The Central Sector schemes 'Promotion and Strengthening of Agricultural Mechanisation through Training, Testing and Demonstration' and 'Post Harvest Technology & Management' standmerged with this Sub-Mission.

#### 6.0 Mission Structure

#### 6.1 National Level

The Mission will have a National Steering Committee (NSC) under Chairmanship of Secretary (AC&FW), with following composition:

Secretary, Department of Agriculture,	Chairman
Cooperation& Farmers Welfare	
Additional Secretary & Financial Advisor, DAC&FW	Member
Additional Secretary (M&T), DAC&FW	Member
Joint Secretary (RKVY), DAC&FW	Member
Joint Secretary (MIDH), DAC&FW	Member
Joint Secretary (Crops), DAC&FW	Member
Joint Secretary (M&T), DAC&FW& Mission Director	Member Secretary
DDG(Engg.) ICAR, Agriculture Commissioner,	Experts
Horticulture Commissioner, ADC(M&T), DC (M&T),	Members
Directors FMTTIs	

NSC will be the policy formulating body giving overall direction and guidance to the Mission, and will monitor andreview its progress and performance. It will be empowered to lay down and amend operational

guidelines, other than those affecting financing pattern. NSC shall meet at least two times in a year.

#### 6.2 Executive Committee

The Executive Committee (EC) will comprise of the following members:

Additional Secretary (M&T)	Chairman
Joint Secretary (M&T), DAC&FW	Member Secretary
ADG(Engg), ADG(P.Engg.) ICAR,	Experts Members
ADC(M&T),ADC(Crops), ADC(Horticulture),	
DC(M&T) and Director, CFMTTIBudni	

- (i) EC will oversee activities of the Mission and approve Action Plans of various states in accordance with the prescribed norms.
- (ii) EC is empowered to reallocate resources across States/Uts from available saving (unutilized funds) out of annual action plan allocation and components and approve projects on the basis of approved financial assistance norms. EC will use its discretion in approving only those components of a project, for which cost norms/patternof financial assistancehave beenapproved by the EFC/CCEA.
- (iii) EC is also empowered to approve special interventions under flexi funds but within the approved components of SMAM and subject to ratification by National Steering Committee. EC will ensure smooth functional linkages among different agencies. EC shall meet as frequently, as required.
- (iv) EC is also empowered to include or delete any agricultural machinery /implements from the list available for financial assistance
- (v) M&T Division in DAC&FW will provide necessary technical support to EC to administer the scheme as under:
  - a) Indicate tentative provisions for each component at the beginning of Financial Year (March- April) to facilitate the States inpreparing Annual Action Plan (AAP) as per format at Annexure -VII.(Separately for General component, SCP component and TSP component)
  - b) Visit the states regularly and frequently to provide guidance in organizational and technical matters.
  - c) Help in the implementation, monitoring and evaluation of various interventions in the mission and provide feedback reports to the Mission Director

- d) Compile materialsfor capacity building, conduct and promotional participate in the events such as, workshops/seminars/exhibitions on different subjects in different regions of the country.
- e) Undertake publicity/information campaign to create awareness on farm mechanization, document and disseminate the success stories.
- f) Assist the State Agencies in concurrent evaluation based on performance indicators
- g) Assess state-wise farm power status, availability and existing gap and identify the future requirements
- h) Prepare the agenda for the EC and NSC meetings
- i) 1% of annual outlay of the Sub-Mission will be earmarked for incurring administrative and other contingent expenses towards the above.

#### 6.3 State Level

6.3.1 The State Level Executive Committee (SLEC) will comprise of the following:

Agricultural Production			Chairman	
Commissioner/Principal Secretary				
Director (Agriculture)/Director (Agricultural			Member Secretary	
Engineering)				
Director (Horticulture)			Co-Member Secretary	
Representatives of SAUs/ICAR/Other line				Experts Members
Departments				

The Committee's main function will be to vet the Annual Action Plan prepared by the State nodal department for implementation of the Sub-Mission. The SLEC will oversee the implementation of mission Components of the respective States through regular meetings with the nodal and other line department. It will also provide inputs to the Executive Committee for appropriate policy formulation.

- 6.3.2 Department of Agriculture or Dept. of Agricultural Engineering, wherever available, shall be the nodal department at the State level for implementation of this Mission. It will provide necessary support to SLEC and will have the following functions:
  - (i) Prepare Mission Implementation Plan (MIP) for entire plan period for achieving the farm power availability to 2.5 kW/ha, primarily focusing on increasing farm mechanization with location specific advantages and easier adaptability for improved production and productivity.

- (ii) List districts as per the farm power availability as per formula at Annexure-III. Select the districts under AAP as per objective criteria
- (iii) Prepare indicative list of machines & equipment which should not be eligible for subsidy under the Mission. While preparing the negative list, State should consider various aspects including fact whether an equipment/machinery can be run commercially without subsidy.
- (iv) Utilize, to the extent possible, services of Subject Matter Specialist (Agricultural Engineering) available with State Government, KVKs, SAUs and ICAR institutes functioning in the State in the mission programmes.
- (v) Prepare annual State Level Action Plan in consonance with Mission's goals and objectives as per the format at Annexure-VII taking into account tentative outlay of State as communicated by DAC at the beginning of Financial Year (March- April).
- (vi) 16.60% of the total allocation for SCP and 8.60 % for TSP will be earmarked. The allocation to SC/ST farmers will be made proportionate to their population in the district. 30% of allocation will be earmarked to the woman beneficiary. Utilize at least 50% of the allocation for small and marginal farmers.
- (vii) 25% of the AAP allocation for the States and 30 % for the UTs would be earmarked as flexi-fund to meet the following objective:
  - a) To provide flexibility to States to meet local needs and requirement within the overall objective of SMAM;
  - b) To pilot innovations and improved efficiency within the overall objective of the Scheme and its expected outcomes;
  - c) To undertake mitigation/restoration activities in case of natural calamities in the farm mechanization sector.
- (viii) Participation of the DAC&FW's representative would be mandatory in the SLSC before the flexi-fund facility is invoke under SMAM
- (ix) Enlist manufacturers/suppliers who have tested their products either from FMTTIs or any identified institute by DAC&FW and empanel the agricultural machinery and equipment on the basis of quality inspection and field performance evaluation for supply under various components of SMAM. A State Technical committee for evaluation of the agricultural machinery and equipment may be constituted for empanelment.
- (x) Ensure suitable integration of AAP with other schemes like RashtriyaKrishiVikasYojna (RKVY), National Food Security Mission (SMAM) and Mission for Integrated Development of Horticulture (MIDH) etc.

- (xi) Compile District wise Action plan into State Action Plan and submit to the State level committee for approval and thereafter forward the same to EC.
- (xii) Receive funds from DAC&FW for implementing organizations and oversee, monitor & review implementation of the programmes
- (xiii) Organize workshops, seminars and training programmes for all interest groups/associations at State level.
- (xiv) Operationalize Information Communication Technology (ICT) enabled management system uptograssroots level.
- The Dangerous Machines(Regulation) Act, 1983, Act No. 35, year 1983 has been repealed by Government of India vide Gazette of India Notification no. 4 of 2018 dated 5.1.2018. Hence, to look into the safety aspects of the farmers/operators while operating various agricultural machinery, it is advised that at the time of distribution of various agricultural machinery through subsidy and also otherwise the farmers may be suitably encouraged to obtain "Pradhan Mantri Suraksha Bima Yojna" for himself/herself and also for the actual operator who operates his/her agricultural machinery. "Pradhan Mantri Suraksha Bima Yojna" which covers the various benefits to the person insured like death, total irrecoverable loss of eyes, hand or feet etc. during operation of any agricultural machinery. It can be extended also under "Pradhan Mantri Jeevan Jyoti Bima Yojana" which provides coverage in case of death due to any reason for persons between the age group of 18 to 50 years.
- (xvi) Conduct independent evaluation to assess the performance of the Mission in their States.
- (xvii) 1% of total allocation to the State may be earmarked for administrative and other contingent expenses. Expenditure in excess of 1% limit will be met by the States from their own resources.

#### 6.4 District Level

6.4.1 The District Level Executive Committee (DLEC) will comprise of the following:

0	
Collector	Chairman
Dy. Director (Agriculture)/Executive Engineer	Member Secretary
/Assistant Engineer (Agricultural Engineering)	
District Agriculture/Horticulture Officer	Co-Member Secretary
Representatives of line Departments,	Experts Members
SAUs/ICAR, nominated progressive farmers,	
representatives from SHG, Project Director	

ATMA,	representatives	from	lead
banks/N	ABARD		

- 6.4.2 DLEC will be responsible for carrying forward the objectives of the Mission for project formulation, implementation and monitoring. The office of DD (A)/JD (A) / EE (A) shall be the district nodal agency with following functions:
  - (i) Identify the areas of low ratio of farm power availability /areas with large number of small and marginal holdings for implementation of farm mechanization components.
  - (ii) Identify beneficiaries (Farmers, Self Help Groups (SHGs), User Groups, Cooperative Societies, Farmer Producer Organizations (FPOs) and Entrepreneurs) to avail the benefits of SMAM in transparent and time bound manner. Identify entrepreneurs/SHGs to establish custom hiring centres.
  - (iii) Tie up with the Banks for credit requirements of the beneficiaries
  - (iv) Ensure that the benefits under various schemes of DAC such as RKVY, MIDH, NMOOP, SMAM etc. are not extended repeatedly to the same beneficiary.
  - (v) Prepare district AAP with physical and financial targets under each component.
  - (vi) Utilize online application software for the entire process of identification and selection of beneficiary, processing of applications and disbursement of financial assistance to the beneficiary after ensuring the proof of procurement of equipment/inputs as per provisions and norms.
  - (vii) Receive funds from State Nodal Department for implementing the programmes.
  - (viii) Make efforts for direct transfer of financial assistance to the farmers/beneficiary on the basis of ADHAR No. wherever infrastructure is functional in the district.
  - (ix) Monitor & display details of approved programme, all activities undertaken and name of beneficiaries, expenditure incurred etc. at the PanchayatBhavan/prominent public place in the cluster/village level and get it placed before the concerned Gram Sabha annually from the point of social audit.
  - (x) Study the impact on production and productivity after the implementation of the programmes and forward the reports to the State nodal Department.
  - (xi) The Dangerous Machines(Regulation) Act, 1983, Act No. 35, year 1983 has been repealed by Government of India vide Gazette of

India Notification no. 4 of 2018 dated 5.1.2018. Hence, to look into the safety aspects of the farmers/operators while operating various agricultural machinery, it is advised that at the time of distribution of various agricultural machinery through subsidy and also otherwise the farmers may be suitably encouraged to obtain "Pradhan Mantri Suraksha Bima Yojna" for himself/herself and also for the actual operator who operates his/her agricultural machinery. "Pradhan Mantri Suraksha Bima Yojna" which covers the various benefits to the person insured like death, total irrecoverable loss of eyes, hand or feet etc. during operation of any agricultural machinery.

6.4.3 ICAR institutes /SAUs and KVKs functioning in the district will provide technical support in formulation of the district action plan, its implementation and monitoring. The technical staff will be sourced from these organizations for imparting training to the farmers and extension personnel.

#### 6.5 Role of Panchayati Raj Institutions (PRIs)

- (i) The State Government and other designated implementing agencies, to the extent possible, will ensure active participation of the Panchayati Raj Institutions (PRIs) in the implementation of this Mission.
- (ii) PRIs may also be involved in publicizing the demonstrations and training of farm equipment and in ensuring participation of farmers from nearby areas for widespread dissemination of technology.

#### 7.0 Procedure for Approval& Fund Flow Mechanism

- **7.1 AAP submission:** AAP duly approved by SLECalong with the minutes of SLEC, shall reachDAC for examination, deliberation and final approval. M&T Division in DAC&FW will examine AAP before it is placed before the EC for consideration, sanction and approving allocation of funds to States.
- 7.2 DAC&FW will allocate the funds to the State and Implementing Agencies based on the following parameters:
  - a) 50% weightage to the proportion of states cultivable area to total cultivable area of the country; and
  - b) 50% weightage to the proportion of state area under small and marginal holdingsto total area under small and marginal farmers in the country.

- c) Release of flexi-funds would be made on a pro-rata basis along with normal releases of SMAM. In other words, no separate system for release or for utilization certificate for flexi-funds would be required.
- (i) Funds would be released to the States /Implementing Agencies as per the Rule 238 of GFRs 2017.
- (ii) The release of the first installment will be upon the approval of AAP and release of 2<sup>nd</sup> installment on submission of Utilization Certificatefor at least 50% of the funds released as first installment, detailed Physical and Financial Report etc. as per relevant provisions of GFRs.
- (iii) Only 10% of the total unspent balance will be allowed to be carriedover to the next financial year. The remaining unspent balance will be adjusted in the amount to be released as 2<sup>nd</sup>installment.
- (iv) In case a State Government /Implementing agency does not seek release of the 2<sup>nd</sup> installment, the unspent balance over and above 10% will be deducted from the release of 1<sup>st</sup> installments during the next fiscal.
- (v) No release of 2<sup>nd</sup> installments would be made after January, only the re-allocated funds will be released to the better performing States. These measures would help in timely and optimum utilization of resources.
- 7.3 (a) From April, 2015, DAC&FW will only transfer funds electronically to the State Governments and Institutions. The department will prepare a digitized list of all implementing agencies for the same and for the same and for this purpose PFMS of CGA will be used.
  - (b) Respective State Governments and Institutions shall ensure that cash component under this Sub Mission is transferred electronically to each beneficiary (Individual or Institutions). The list shall be provided to the DAC&FW after transfer of benefit directly to the beneficiaries accounts.
  - (c) It would be ensured by the State Government that no eligible beneficiary suffers for want to Aadhar and it would be with the State Governments responsibility to ensure that Aadhar and it would be with the State Governments responsibility to ensure that Aadhar enrolment of such beneficiaries is carried out on priority at the permanentenrolment centres set up for the purpose. However, the benefits will not be denied for not having the Aadhar number by the eligible beneficiary.

#### 8.0 Monitoring

- (i) The Mission envisages a coordinated approach for monitoring and evaluation with active involvement of implementing agencies, beneficiaries and other stakeholders.
- (ii) A combination of periodic desk review, field visits and web-based mechanism will be adopted for releasing funds, monitoring physical and financial progress and monitoring the progress of other Mission interventions at National level by Mechanization and Technology Division (M&T) in the DAC&FW.
- (iii) All implementing agencies will ensure that a report regarding utilization of funds released to them and the physical and financial progress of the SMAM are submitted to DAC&FW regularly, as per prescribed Performa at Annexure VIII (A for States Govt. only and B for autonomous body) and IX (Separately for General, SCP and TSP Component) respectively.

#### 9.0 Impact Assessment, Periodic Evaluation and Reporting

- (i) DAC&FW will evaluate efficacy of this Mission on a 'Two yearly' basis through a 'third party'. The agency will assess the efficacy, performance, outcome and shortcomings of the Mission and recommend suitable corrective measures.
- (ii) Information and communication technology will be deployed extensively for ensuring transparency in the implementation process and effective monitoring of the Mission programme.

#### 10.0 Expected Outcome

The Mission envisages inclusive growth of farm mechanization in the country in the next five years in terms of farm power availability, human resource development, and productivity and quality assurance of agricultural machinery.

#### 11.0 Interventions

Interventions proposed under the eight components under SMAM are given below whereas norms of financial assistance are summarized in Annexure-II.

#### 11.1 Central Sector components namely,

- (a) Promotion and Strengthening of Agricultural Mechanization through Training, Testing and Demonstration; and
- (b) Demonstration, Training and Distribution of Post-Harvest Technology and Management (PHTM)

#### Will have the following interventions:

- (i) Training in field of farm mechanization &post-harvest management
- (ii) Testing of agricultural machines and equipments for performance evaluation
- (iii) Demonstration of newly developed agricultural/horticultural equipments and post-harvest technologies at farmers' fields.
- (iv) Establishment of post-harvest technology for primary processing in the production catchments

#### 11.1.1 Implementing Agencies for Central Sector Components

Training	1) FMTTIs
	2) State identified institutions
	3) ICAR institutions
	4) ATMA institutions
	5) KVKs under ICAR
	6) National Innovation Foundation (NIF)
	7) PSUs of GOI
	8) FPOs
Testing	1) FMTTIs
	2) Identified State Testing Centres
	3) Other Government/ICAR institutions
Demonstration	1) FMTTIs
	2) State identified institutions
	3) ICAR institutions
	4) ATMA institutions
	5) KVKs under ICAR
	6) National Innovation Foundation (NIF)
	7) PSUs of GOI
	8) FPOs
Establishment of PHT	1) State Governments

The implementing agencies will have the following functions:

- (i) Annual Action Plans of components Training', Testing'&'Demonstration'will be prepared by FMTTIs and ICARand other implementing agencies as per Annexure-VII and submit the same to the M&T Division of DAC&FW for approval of EC
- (ii) Identified State Testing Centreswill submit their action plans with regard to 'Testing' component to the state nodal agency for incorporating in State AAP as per Annexure-VII

- (iii) State identified institutions, ATMA institutions, FPOs will submit their action plans with regard to 'Training' & 'Demonstration' components to the state nodal agency for incorporating in State AAP as per Annexure-VII.
- (iv) For the component of 'Establishment of Post-Harvest Technology', State Governments will incorporate the requirements in AAP as per Annexure-VII
- (v) All the implementing agencies will operationalize ICT enabled MIS for effective and transparent implementation/monitoring of the components being implemented by them.

#### 11.1.2 Training:

- (a) Implementing Agencies: FMTTIs, State identified institutions, ICAR institutions, ATMA institutions, KVKs under ICAR, National Innovation Foundation (NIF), PSUs of GOI, FPOs.
- (b) Training Calendar:FMTTIs and identified institutions for outsourcing of training will publish annual training calendarseparately for Training Programmes under AnnexureIV-A & IV-B on their websites and communicate to all the State Governments, ATMA agencies and implementing agencies. Publicity of the training programmes will also be made through the print and other electronic media on quarterly basis. The training component in the AAP will be integrated with ATMA programmes.
- (c) Beneficiaries: For all Skill Development Programmes under Annexure- IV-A &IV -BDistrict nodal agencies will identify and sponsor beneficiaries such as Farmers, Members of SHGs, FPOs, rural youthand other entities on receipt of training calendar. If required, the training institutions will also invite applications for specific courses from the targeted district under the State AAP.

Trainers, Officials of State Governments, Technicians, Entrepreneurs and Manufacturers etc. will apply to the respective FMTTIs for appropriate courses.

**(d) Training Courses:** FMTTIs will conduct training programmes as per Annexure-IV-A & IV B (Aligned to NSQF)

The State identified institutions will conduct user level training programmes Annexure- IV-A.

Training in post-harvest management will also be a part of training calendar. The training courses will be designed by the implementing agencies in consultation with CIPHET Ludhiana and AICRP Centres in the region.

**(e)Financial assistance:**Under all he Skill Development Training Programmes as given under Annexure- IV-A (User level courses) &IV B (Aligned to NSQF) organized at FMTTIs, will be applicable as per Gazette Notification dated 8- 14 August, 2015 of Ministry of Skill Development and Entrepreneurship as per details given below.

# i.Boarding and Lodging Charges (For all implementing Agencies: FMTTIs, State identified institutions, ICAR institutions, ATMA institutions, KVKs under ICAR, National Innovation Foundation (NIF), PSUs of GOI, FPOs

Trainees admitted/Sponsored by State Nodal agencies will reimburse Boarding and Lodging Costs as per the table below:

X categories Cities/ Town per day per Trainee	Rs 300
Y categories Cities/ Town per day per Trainee	Rs.250
categories Cities/ Town per day per Trainee	Rs.200
Rural areas and any area not notified as a Municipal/ town Area	Rs.175

#### ii. Travelling Expanses

#### (a) Trainees from an area other than Special Area:

#### > For FMTTIs:

Travel expenses to the trainees admitted in these courses will be paid on actual basis by ordinary mode of transport from their place of residence to the training institute and back.

For State identified institutions, ICAR institutions, ATMA institutions, KVKs under ICAR, National Innovation Foundation (NIF), PSUs of GOI, FPOs:

Actual to and fro travel expenses by ordinary mode of transport in ordinary class, up to maximum of Rs. 500/- per trainee for other Institutions

#### (b) Trainees Special Area (for all implementing Agencies )

For candidates from special area undergoing training outside such special area, to and fro cost as per actual subject to a maximum of Rs 5000 per trainee shall be payable for:

- Residential Training, and/or
- In respect of Skill Development programmes where trainees from special areas(as defined herein)are trained outside these special areas, and/or
- Training Programmes anywhere in the country where women trainees have to travel more than 80 kms from their homes to reach the nearest training centre and who are availing of boarding and lodging arrangements made for them. Upon successful completion of non-residential skill training programmes, and after certificatation, all women candidates as well as persons with disability will be reimbursed the cost incurred in travelling to and from the training centre at the following rates.

Reimbursement of Conveyance Costs per Amount (in Rs.)				
month.				
1) Training Centre within District of	1000/-			
domicile				
2) Training Centre outside District of	1500/-			
domicile				

#### iii. Institutional Charges:

#### A. Base Cost

For State identified institutions, ICAR institutions, ATMA institutions, KVKs under ICAR, National Innovation Foundation (NIF), PSUs of GOI, FPOs

The Base Cost for the different Sectors will be as under:

(i) Rs,38.50 per hour of training for trades/sectors listed in Category1 of SCHEDULE-II

- (ii) Rs.33/- per hour of training trades/sectors listed in Category II of SCHEDULE-II
- (iii) Rs.27.50 per hour of training trades/sectors listed in Category III of SCHEDULE-II

Cost would be subject to periodic enhancement of 10 % annually or as decided by Common Norms Committee provided minimum duration between any 2 revisions would be atleast 6 months

#### B. Third Party Certification & Assessment Cost

# For FMTTIS, State identified institutions, ICAR institutions, ATMA institutions, KVKs under ICAR, National Innovation Foundation (NIF), PSUs of GOI, FPOs

To ensure independent and unbiased assessment and certification of trained candidates, cost for certification and assessment would be payable to an independent third party authorized for conducting assessments and certifications. The amount shall be over and above the Base cost and shall range from Rs 600 to Rs 1500 per candidate as decided by individual Ministries/Departments.

#### C. Post Placement Support

# For FMTTIs, State identified institutions, ICAR institutions, ATMA institutions, KVKs under ICAR, National Innovation Foundation (NIF), PSUs of GOI, FPOs

In order to enable the newly skilled persons to settle into their new job/vocations, Post placement support would be provided directly to the candidate at the rate of Rs 1500 per month for the flowing durations;

Post placement Support @	Men	Women
Rs 1500 per month		
Placement within district of	01 months	02 months
domicile		
Placement outside district of	02 months	03 months

domicile

#### iv. Procurement of Machines:

- (a) Depending on the requirements, FMTTIs, State identified institutions (owned and substantially controlled by State Governments), ICAR institutions, ATMA institutions; KVKs under ICAR, National Innovation Foundation, PSUs of GOI will be provided financial assistance (100 % grant-in-aid) for purchase of machinery and equipments for conducting training.
- (b) FPOs will be provided 80% grant-in-aid for purchase of machinery and equipments for conducting training.
- (c) The proposals for purchase of machinery including postharvest technology machines for Training will be submitted by the implementing agencies alongwith their Annual Action Plan.
- (d) The proposals will be considered by the Executive Committee of the Scheme for allocation of funds'

#### (f) Monitoring and evaluation

All implementing agencies will monitor the outcome of training in terms of employment generation, self-employment, improvement in productivity/skills etc.

### 11.1.3 Testing:

- (I) Implementing Agencies: FMTTIs, Identified State Testing Centres, Other Government/ICAR institutions
- **(II) Beneficiaries:** Manufacturers/applicants of agricultural machines, R&D institutions engaged in development of farm machinery.
- (III)Standards: Testing will be carried out as per relevant Indian Standards of BIS. If, the Indian Standard for any machine is not available, the testing may be carried out as per any other relevant International standard. Based on these standards test codes will be applied for various categories of agricultural machinery and implements. All such test codes will be communicated by the M&T Division of DAC&FW to all the centres for uniform procedures of testing.

## (IV) Implementation:

- (i) The State Government shall evolve their own system /test centers to ensure the quality of the agricultural implements and tool costing less than Rs.35,000 (Rupees Thirty fivethousand) before they are supplied under Government assistance programmes.
- (ii) If consider appropriate, the State Government insistthe test report of any FMTTI or designated testing of DAC&FW from manufacturer/supplier of the agricultural implements and tools costing less than Rs. 35000(Rs. Thirty fiveThousand)or a system of self-certification for the desired specification/quality/ performance of agricultural implements and tools may be accepted from manufacturers or supplier.
- (iii) The agricultural implements and tools costing less than Rs. 35000.00 (Rs.Thirty five thousands) as at SI.No (i) above covers only hand tools, garden tools, animal drawn/manually / tractor drawn implements required for land preparation/ sowing and planting/ intercultivation/ harvesting and threshing/ transportation operations.
- (iv) All types of self-propelled agricultural implements/ equipments/ machinery and all types of plant protection equipments are not covered in clause no.(i) and (iii) above.
- (v) A system of random pre/post dispatch checks of above agricultural implements and tools being promoted through Government programme shall be evolved by the State Government. If the situation warrants randomly picked up agricultural implements and tools shall be tested/ retested from any FMTTI or any designated testing center of DAC&FW for asserting their specifications, performance and quality.
- (vi) The testing of agricultural implements, tools and machinery costing more than Rs. 35000.00(Rs. Thirty five thousands) from the FMTTIs or designated testing centres of DAC&FW as specified is mandatory, before they are supplied under Government assisted programmes.
- (vii) CFMTTI, Budni will test tractors, power tillers, combine harvesters, and other self-propelled machines. It will also test tractors, power tillers, combine harvesters, agricultural trailers, engines for mass emission of exhaust gasses and other machinesfor compliance under CMVR,
- (viii) NRFMTTI, Hisar will test Combine harvesters, plant protection equipments, irrigation pumps, diesel engines and other self-propelled crop production equipments and machines. It will also test combine harvesters for compliance under CMVR.

- (ix) SRFMTTI, Garladinne will test power tillers, self-propelled machines/equipments, including power drawn agricultural machines and equipments.
- (x) NERFMTTI, BiswanathChariali (Assam) will test power drawn agricultural machines and equipments including non-self-propelled agricultural equipments in order to meet requirements of manufacturers of Eastern and North Eastern Region.
- (xi) The identified institutions as per Annexure –V or the institutions as may be recognized in future shall test all non-self-propelled agricultural machines/equipment(and other specialized equipments as per separate notification to individual center).
- **(V) Testing charges:** All the testing institutions will follow the testing charges fixed by DAC&FW as per Annexure VI (as revised from time to time). GST on the testing charges will be as per the applicable rates. The testing charges received will be deposited in the revenue account of Government.

#### (VI) Monitoring:

- (i) Machines will be tested at the request in writing of the manufacturer/accredited importers referred to as "Applicant" herein-after. Online application software will be developed for receiving applications and processing the same.
- (ii) The application should be accompanied with all relevant technical specification, operator manual, workshop manual etc. of the machine as well as detailed postal address, email id and phone number of the applicant.
- (iii) The application will be scrutinized by the testing institutions and the shortcomings if any will be communicated to the applicant within a week.
- (iv) The applications fulfilling requirements will be accepted by the testing institute and the date for starting the test will be informed to the applicant within a week.
- (v) Testing of the machine will be taken up as per the relevant standard within 15 days from the date of accepting the application.
- (vi) After completion of all tests, a draft report in the standard format will be released to the applicant for comments and the applicant should submit his comments within 15 days.

- (vii) After receipt of comments, necessary changes in the draft report as per agreed comments may be made in the report and the final report may be released. The testing institutions will also bring out one page salient features of the machine which could be easily understood by the users of the machine.
- (viii) Test reports released by the designated institutions will have validity across the country and accepted by all the States and UTs for financial assistance and implementation of other Government Schemes where test reports are required.
- (ix) The testing institutions will publish the list of test reports quarterly and forward the same to the DAC&FW for uploading it on the website of the Department. The institutions which do not carry out testing as per the guidelines of the Department and as per relevant test codes and upload the test reports on the website will be liable for cancellation of recognition.
- (x) All the testing institutes will ensure that the testing is completed within the stipulated time frame and there is no waiting list for testing.

#### (VII) Financial Assistance:

(i) Proposals for augmenting the facilities and infrastructure for testing shall be included in the AAP. The identified institutions for testing will be provided one time grant of Rs. 1.5 crores each as per their proposals in this regard. In a financial year 10 such identified institutions will be considered for providing grants. The grants provided will not be utilized to meet the recurring expenditure on testing activities and purchase of vehicles etc.

#### 11.1.4Demonstration

Field demonstrations of package of machines/equipments will be conducted in the districts identified for AAP

- (a) Implementing Agencies: FMTTIs, State identified institutions, ICAR institutions, ATMA institutions, KVKs under ICAR, National Innovation Foundation (NIF), PSUs of GOI, FPOs
- **(b) Objectives:**(i) To conduct large scale demonstrations on cropping system based approach to promote mechanization in districts with low farm power availability (ii) ToIntroduce improved/newly developed agricultural implements and machines and post harvest technology in crop production/post harvest management system (iii) All demonstrations will be conducted with participation of

custom hiring centres established in the districts. Also, manufacturers may be engaged as partners for demonstration.

**(c) Identification of Beneficiaries:** Farmers, SHG of farmers, Users Groups, Cooperative Societies, entrepreneurs etc will be identified by the district nodal agencies as per the broad criteria given under 6.4.2.

#### (d) Area of operation:

- (i) In case of State level agencies, demonstrations will be conducted in villages selected in the AAP districts.
- (ii) Central implementing agencies will also select districts/ villages in the concerned State AAP
- (iii) Demonstrations will be conducted in a contiguous block of 100 ha or more. Size of block for hill and North-Eastern States will be 10 ha. Demonstrations should be evenly distributed in the selected blocks.
- (iv) At least 50% of the total demonstrations will be conducted on cropping patterns of selected villages. These will be done by CHCs in those districts. Remaining 50% demonstrations will be carried out on new technology machines/equipments with the engagement of manufacturers/Hi-tech equipment hubs
- (v) All farmers in a block would be included in demonstration. For each farmer, at least 0.4 ha area will be included.
- **(f) Identification of powered machines/equipments to be demonstrated:** Type of equipment/machine to be demonstrated will be based on requirements of operations in a cropping season. This will be decided by implementing agencies in consultation with State Agricultural functionaries/State Agricultural Universities, ICAR Centresthrough their Regional Research Stations/KVKs located in the area while preparing the AAP.

#### (g) Financial Assistance(Refer Annexure-II (b) (A):

(i) Depending on the requirements, FMTTIs, State identified institutions (owned and substantially controlled by State Governments), ICAR institutions, ATMA institutions, KVKs under ICAR, National Innovation Foundation, PSUs of GOI will be provided financial assistance (100 % grant in aid) for purchase of machinery and equipments including the post-

- harvest technology machines for conducting demonstrations on the farmers' fields.
- (ii) FPOs will be provided 80% grant-in-aid for purchase of machinery and equipments including post-harvest technology machines for conducting demonstrations on the farmers' fields
- (iii) The proposals for purchase of machinery for demonstration will be submitted by the implementing agencies alongwith their Annual Action Plan.
- (iv) The proposals will be considered by the Executive Committee of the Scheme for allocation of funds
- (v) Alternatively, the Implementing agencies which do not want to purchase the machines for demonstration, will hire the machines to be demonstrated from the Custom Hiring Centres/manufacturers. In such proposals, Government of India will provide 100% assistance @ Rs. 4000 per hectare upto 1000 ha per season to meet contingency expenditure such as charges towards hiring of machines alongwith implements/ self-propelled machines, Expenditure towards hands on training and Miscellaneous expenditure such as expenditure towards transport, labour, publicity and printing of technical literature etc.
- (vi) The rate of grant to meet the contingent expenditure will be Rs. 2000/- per hectare in the case of the implementing agencies that will be provided financial assistance for purchase of equipments and machines for demonstration.
- (vii) Expenditure over and above specified limits will be borne by respective implementing agencies
- (viii) No expenditure will be met from the scheme for recruitment of staff, TA/DA of staff, purchase computer, video camera, etc. or for any infrastructural development of the implementing agencies.

#### (h) Monitoring:

(i) All demonstrations will be carried out under close supervision of Implementing Agency which will record and document observations. Analysis shall be made to bring out cost effectiveness and benefits of technology. Success story of demonstrations will be documented and disseminated for the benefits of other farmers in the State and also for farmers of other States.

- (ii) State Department of Agriculture/ Other Implementing Agency concerned will ensure effective implementation and supervision of Scheme.
- (iii) Officers from Farm Machinery Training and Testing Institute at Budni (M.P.), Hisar (Haryana), Garladinne (A.P.), BiswanathChariali (Assam) and officers from the Ministry of Agriculture shall be undertaking random visits to see actual demonstration and assess performance of equipment demonstrated and their acceptability among farmers.

#### 11.1.5 Establishment of Post-Harvest Technology

- (a) Implementing Agencies: State Governments
- **(b) Identification of Technologies:**Technical guidance on the available post-harvest technologies will be provided by CIPHET Ludhiana and also by other ICAR/CSIR/SAU centers. These may relate to
  - (i) Primary processing& value addition
  - (ii) By-product management
  - (iii) Low cost scientific storage
  - (iv) Transit storage
  - (v) Transport of perishable farm produce
- (c) Identification of Beneficiaries: Individual farmer, SHG/UG of farmers/ Cooperative Societies of Farmers/FPOs/Entrepreneurs will be identified by the district nodal agencies as per the broad criteria given under 6.4.2
- (d) Financial assistance: PHT units shall be established in the production catchments with 50% assistance from the Government of India limited to Rs. 1.25 lakhs per machine/technology. (Additional 10 % assistance limited to Rs. 1.50 lakhs will be available for SC, ST, small & marginal farmers, women, and NE States beneficiary). Remaining cost will be borne by beneficiary.
- **(e) Implementation & Monitoring**: State Department of Agriculture will ensure effective implementation and supervision of Scheme by officers specially designated for the purpose.

#### 11.2 Interventions under Centrally Sponsored Scheme

# 11.2.1 Financial Assistance for Procurement of Agriculture Machinery and Equipment

- (a) Implementing Agencies: State Governments
- (b) Implementation & Monitoring:
  - (i) State Department of Agriculture will ensure effective implementation and supervision of Scheme by officers specially designated for the purpose.
  - (ii) It will be ensured that the benefits under various other schemes of DAC&FW are not extended to the same beneficiary twice.
  - (iii) Manufacturers/suppliers that have tested their products either from FMTTIs or any identified institute by DAC&FW will be enlisted.
  - (iv) Crop specific agricultural equipment /machinery tested and available with the enlisted manufacturers will be offered to the beneficiaries.
  - (v) Complete freedom to beneficiary will be available for selection of agricultural machinery and equipment as per his/her choice.
  - (vi) SLEC will empanel the agricultural machinery and equipment on the basis of quality inspection and performance evaluation reports for supply in the financial year.
- (c) **Identification of Beneficiary:** Beneficiaries will be identified by the district nodal agencies as per the broad criteria given under 6.4.2
- **(d) Financial Assistance:** willbe available to the selected beneficiaries as perapproved pattern of assistance given at Annexure II (c)

### 11.2.2 Farm Machinery Banks for Custom Hiring

(i) Implementing Agencies: State Governments, NCDC, PSUs of Government of India, Organization of Government of India

#### (ii) Objectives of custom hiring enterprises

- (i) To promote mechanization in districts with low farm power availability
- (ii) To provide hiring services for various agricultural machinery/implements and PHT equipments applied for different operations.
- (iii) To expand mechanized activities during cropping seasons in large areas especially in small and marginal holdings.
- (iv) To involve manufacturers/KVKs in operation and maintenance of machines in the hiring centres
- (v) To Introduce improved/newly developed agricultural implements and machines in crop production

#### (iii) Area of Operation & Composition of Custom Hiring Centre

- (i) Custom hiring centres will be established in the districts identified for implementation in the State AAP.
- (ii) The districts in State AAP will include villages having low farm power availability and large area under small and marginal holdings.
- (iii) Each CHC of agricultural machinery/implements will have the capacity to cover minimum area of 10 ha/day and at least 300 ha in a cropping season. Machines can be hired for entire operations from land development to residue management
- (iv) Each CHC will be set up on specific crop based, cost based and cluster based approach. Each custom hiring centre will have small crop specific machinery suitable for local requirement for mechanized farming under small and marginal holdings.
- (v) The following parameters may be chosen for selection of village/Town for setting up of custom hiring centers:
  - (a) Lowratio of farmpower availability.
  - (b) Low number of tractor population
  - (c) Small & marginal operational Holdings
  - (d) Less productivity of food grains but potential to enhance productivity.
- (vi) District level agencies will identify/invite application to set up CHCs

(vii) Any business model can be adopted for expanding the reach of mechanization through custom hiring centres. It will be necessary to maintain, upgrade the CHCs from time to time.

#### (iv) Identification of machines/Implements:

- (i) Beneficiaries will select such machinery/implements appropriate for the crops grown in the identified districts
- (ii) Beneficiaries will select machinery/implements for entire operations of a particular crop grown in that area
- (iii) The capacity of the machines will be selected on the basis of area to be covered in a cropping season.
- (iv) Machines/equipments will be selected from the list at Annexure II(c)
- **(v) Procurement of Machinery:**Procurement would be from the approved suppliers/manufacturers. The beneficiary is free to procure any brand as per his choice from the approved list. However, only tested equipments from either FMTTIs or designated Institute from DAC&FW are eligible for financial assistance for establishing the custom hiring centres.

#### (vi) Financial Assistance:

- (i) Financial assistance for setting up of custom hiring centres will be available to Rural Entrepreneurs (Rural youth and farmer as an entrepreneur), Cooperative Societies of farmers Societies. Registered Farmers Farmer Organizations (FPOs) and Panchayatsas per pattern of assistance as indicated in Annexure II (d). The maximum permissible assistance per machine under the project will be as per the assistance indicated against each machine in Annexure -II (c) andfor other machines which are not indicated in the list of Annexure -II (c), it will be 40% of the machine cost. The sample sheets of project cost calculations and allowable financial assistance is given in **Annexure - XI**
- (ii) The custom hiring centres having the project cost more than Rs. 25 lakh will be established under the model of credit linked back ended financial assistance.
- (iii) The bank will lock the financial assistance released to them for a period of 4 years. The beneficiary will repay the complete bank loan within the period of not less than 4 years. The Beneficiary will not be allowed to transfer/ sell/

mortgage the CHC to any one before the completion of 6 years.

#### (vii) Monitoring:

- (i) The established CHCs will be provided technical assistance from KVKs/enlisted manufacturers/Approved Testing Centres, FMTTIs and ICAR centres to maintain and train CHC entrepreneurs.
- (ii) The custom hiring centres established under the mission will be supervised by the District Agriculture Officer for its operation so that custom hiring charges are reasonable and affordable to small and marginal farmers
- (viii) Partnerships: The CHCs can be established by the manufacturers in PPP mode. They may also be encouraged to undertake maintenance of the machinery for a given number of CHCs. They may undertake exposure visits of the beneficiaries in other districts/states. They may enter into annual maintenance contracts for supply of spare parts

#### 11.2.3 Hi-Tech, High Productive Equipment Hub for Custom Hiring:

(a) Implementing Agencies: State Governments, NCDC,PSUs of Government of India, Organization of Government of India

#### (b) Objectives

- (i) To promote utilization of hi-tech, high value machines for higher productivity
- (ii) To provide hiring services for various high value crop specific machines and PHT equipments applied for different operations.
- (iii) To expand mechanized activities during cropping seasons to cover large areas
- (iv) To involve manufacturers for setting up of such centres

### (c) Area of Operation & Composition of Hi-tech Hub

- Hubs will be established in the districts identified for implementation in the State AAP having larger area under cash and other value crops.
- (ii) Each hubof agricultural machinery/implements will have the capacity to cover at least 500 ha in a cropping season. Machines can be hired for crop specific operations
- (iii) The following parameters may be chosen for selection of village/Town for setting up of custom hiring centers:
  - a) Large area under cash crops/high value crops
  - b) High potential areas
- (iv) District level agencies will identify/invite application to set up hubs
- (v) It will be necessary to maintain and upgrade the hubs from time to time.

#### (d) Identification of machines:

- (i) Rural Entrepreneurs (Rural youth and farmer as an entrepreneur), Cooperative Societies of farmers Registered Farmers Societies, Farmer Producer Organizations (FPOs) and Panchayatswill select such machinery and PHT equipments appropriate for the cash and other high value crops grown in the identified districts
- (ii) The type and capacity of the machines will be selected on the basis of area to be covered in a cropping season.

#### (e) Financial Assistance:

- (i) Financial assistance for setting up of hubs will be available Rural Entrepreneurs (Rural youth and farmer as an entrepreneur), Cooperative Societies of farmers Registered Farmers Societies, Farmer Producer Organizations (FPOs) and Panchayatsas per pattern of assistance as indicated in Annexure II (e). The maximum permissible assistance per machine under the project will be as per the assistance indicated against each machine in Annexure –II (c) and for other machines which are not indicated in the list of Annexure –II (c), it will be 40% of the machine cost. The sample sheets of project cost calculations and allowable financial assistance is given in **Annexure XI**
- (ii) Hubs will be established under the model of credit linked back ended financial assistance.

(iii) Bank will lock the financial assistance released to them as per the terms of repayment of loan. The Beneficiary will not be allowed to transfer/sell/mortgage the hubs to anyone.

#### (f) Monitoring:

- (i) The established machinery hubs will be provided technical assistance from KVKs/ manufacturers/Approved Testing Centres, FMTTIs and ICAR centres for maintenance and training
- (ii) The hubs established under the mission will be supervised by the District Agriculture Officer for its operation so that hiring charges are reasonable and affordable to farmers.

#### 11.2.4 Promotion of Farm Mechanisation in Selected Villages

(a) Implementing Agencies: State Governments, NCDC

#### (b) Objectives:

- (i) To establish farm machinery and PHT equipments banks by the Cooperative Societies of farmers, Registered Farmer Societies, FPOs, Panchayats in the selected villages of states so as to encourage members to take up appropriate mechanized operations
- (ii) To conduct demonstrations in large areas with the assistance of Custom Hiring Centers set up under component (4).

#### (c) Area of Operation:

- (i) Districts with low farm power availability will be selected in each state.
- (ii) Villages will be selected from these districts
- (iii) Cooperative Societies, Registered Farmer Societies FPOs and Panchayatsin these villages will be eligible for financial assistance for setting up of farm machinery banks for operating machines and equipments by the member beneficiaries
- (iv) Custom Hiring Centres set up under component (4) shall be involved in conducting demonstration of the machines and equipments as per the guidelines indicated in para 11.1.4

- (d) Financial Assistance: Each village will be eligible for setting up of farm machinery banks upto a maximum project cost of Rs. 10 lakhs. Financial assistance @80% of the project cost will be provided for such machinery banks. For demonstration, financial assistance will be provided as per the guidelines given in 11.1.4
- **(e) Monitoring**: Supervised by the District Agriculture Officer foroperating cost of Farm Machinery Banks and demonstrations to be conducted by CHCs.

#### 11.2.5 Assistance for Mechanized operations.

- (a) **Implementing Agencies:** State Governments
- **(b) Objective:**To provide per hectare assistance to the beneficiaries in the villages identified under 11.2.4. Beneficiaries will utilize services of farm machinery banks set up by group of farmers, cooperative societies and any such other entities, for various farm operations.
- **(b) Financial Assistance:**Financial assistance will be available to the beneficiaries upto a maximum of 2 ha area as per following norms:
  - (i) For tractor/power operated operations Rs. 2000/ha per farmer per year
  - (ii) For animal drawn mechanized operations- Rs. 1000/ha per farmer per year
  - (iii) For manual operations Rs. 750/ha per farmer per year
- **(c) Monitoring**: Supervised by the District Agriculture Officer for selection of operation and area to be covered under each operation

# 11.2.6 Promotion of Farm Machinery and Equipment in North-Eastern Region

- (a) Implementing Agencies: NER State Governments
- (b) **Objectives:** 
  - (i) To increase pace of mechanization adoption in North-Eastern States. Some of the regions in these States are not able to leverage the advantages of farm mechanization due to constraints like hilly topography, socio-economic conditions, high cost of transport, lack of institutional financing and lack of farm machinery manufacturing industries. Therefore, these states require light weight machines and equipments suitable for these regions.

(ii) To encourage the farmers for adopting good agricultural practices in specific crops/areas.

#### (c) Implementation & Monitoring:

- (i) In order to provide suitable mechanized solutions in the identified areas of these States, separate allocation over and above the allocation in different components of the submission will be made.
- (ii) The States will identify such areas and prepare project proposals as per the pattern of assistance as indicated in Annexure –II (h)
- (iii) Project proposals submitted by the States will be examined in DAC&FW and approved by EC for financial assistance.
- (iv) State Department of Agriculture/ Other Implementing Agency concerned will ensure effective implementation and supervision of Scheme by officers specially designated for the purpose.
- (d) **Financial Assistance:**Financial assistance will be available to the beneficiaries as per the pattern of assistance indicated in Annexure-II (h).

#### 11.2.7 Exposure visits:

- (a) In order to enrich the knowledge base of the technical personnel/progressive farmers involved in the mission, exposure visit/training of technical staff /officers at International organizations like IRRI, ICRISAT, CSAM China, NIAE Korea, JICA Japan,NTTL USA etc. or any other research organization in farm mechanization within the country and abroad would be organized.
- (b) A sum of Rs. 2.0 Crore will be earmarked for the entire plan period.
- (c) EC would approve the proposal of exposure visit/ training.

# 12.0 Central Project Monitoring Unit (CPMU) for monitoring of SMAM:

#### 12.1 Project Management Team

I. A Project Management Team (PMT) will be constituted at the National level under the leadership of Joint Secretary (Machinery). One Consultant in identified field of expertise and one Senior Technical Assistant would be hired on contractual basis.

- II. A PMT will also be constituted at the State and the District level under the leadership of a Project Manager drawn from the State Government. At the State level, the Project Manager will be of the level of a Director(Agril) / Director (Agril.Engg). At the District level, the Project Manager will be of the level of a Deputy/Joint Director (Agriculture Engineering) or the District Agriculture Officer.
- III. The PMTs will be assisted by Technical Experts to be appointed on contractual basis for technology transfer and implementation of the Mission. The PMTs will have the responsibility to ensure collaboration among various line departments in the Centre / State /District to achieve the targets. The PMT will provide the technical services/advice. Honorarium to Project Management Team members will be fixed as per the extant financial norms fixed under other schemes of DAC&FW. Essential and desirable qualifications for the candidates to be appointed for contractual services are given at **Annexure-X.**
- IV. National/State/District PMT can engage need based experts with the permission of the General Council from fields like Publicity and Communications, Financial Management, Information Management etc.
- V. The pay of Consultant/Senior Technical Assistant/Data Entry Operators/ MTS will be regulated from time to time according to Government norms.
- VI. The Project Management Team will have the following responsibilities:
  - (a) Guide the States/Districts in organizational and technical matters. (b) Help in the implementation and monitoring of the various interventions of the SMAM.
  - (c) Assist the States/districts in capacity building programmes
  - (d) Assist the district and state agencies in concurrent evaluation based on case studies in identified districts and document and disseminate the success stories.
  - (e) Undertake publicity/information campaign to promote the Mission objectives

#### 13.0 Activity Mapping: Enclosed as Annexure-I

Annexure-I Activity mapping for effective devolution of funds, functions and functionaries under Sub-Mission on Agricultural Mechanization

S.N	Components	Allocation		Allocation	Implementing Agencies	Remarks
		(Rs.Cr.)	based on	function(s)		
			Centre	State		
1	Component No.1 (Existing)	As per Annual	100	0	FMTTIs, State identified institutions, ICAR institutions,	1) Implementingagencies will be responsible for
2	Component No.2(Existing)	Budget	100	0	ATMA institutions, PSUs of GOI, State Governments	coordination with local and State Governments.
3	Component No.3(New)		60	40	State Governments#	2) Annual Action Plan will build on the activities at the village level in district
4	Component No.4(New)		60	40	State Governments#	with low farm power availability
5	Component No.5(New)		60	40	State Governments#	availability
6	Component No.6(New)		60	40	State Governments#	
7	Component No.7(New)		60	40	State Governments#	
8	Component No.8(New)		90	10	State Governments of 8 North- Eastern States	

#- Except State Governments of 8 North-Eastern States and Himalayan States for which it will be 90:10 and 100% Central Share for Union Territories.

- 1. Promotion and Strengthening of Agricultural Mechanization through Training, Testing and Demonstration
- 2. Demonstration, Training and Distribution of Post Harvest Technology and Management (PHTM)
- 3. Financial Assistance for Procurement of Agriculture Machinery and Equipment
- 4. Establish Farm Machinery Banks for Custom Hiring
- 5. Establish Hi-Tech, High Productive Equipment Hub for Custom Hiring
- 6. Promotion of Farm Mechanisation in Selected Villages
- 7. Financial Assistance for Promotion of Mechanized Operations/hectare Carried out Through Custom Hiring Centres
- 8. Promotion of Farm Machinery and Equipment in North-Eastern Region

## **Functions:**

S	Activity	Union	State	District		Local Governm	ent	Implementing
No	Description	Government	Government	Administration		anchayati Raj S		Agency
					Zilla Parishad	Intermediate	Village Panchayat	
						Panchayat		
1	Setting	Formulate	Disseminate	Implement	Disseminate			Maintain the
	Standards	guidelines and	guidelines and	guidelines	guidelines at the			physical and
		cost norms for	norms at		block level and			financial
		SMAM	District Level,		below			progress
			preferably in					
	D1 :	D 11 11	local language	D 1 .	0 . 1 .			
2	Planning	Provide the	1.Prepare	Formulate	Contribute in		Contribute in selection	
		tentative outlays	strategic plan	District	preparing District		of equipments for	
		for preparing the	2. Prepare	Action Plan	Annual Action		demonstration,	
		State Annual	State Annual		Plan		beneficiaries in	
		Action Plan	Action Plan				capacity building and	
2	T1	D-1	D-1		Duisuities musicate	O -14	availing the assistance	
3	Implementation of Mission	Release of funds	Release of		Prioritize projects	Select	Contribute in selection	
	of Mission	to States by DAC	funds to		as per requirement	location of	of equipments for	
			District level		of the Districts.	activity within the	demonstration, beneficiaries in	
						district, selec	capacity building	
						beneficiaries	availing the assistance	
4	Monitoring and	1.Review	Furnish the		Review progress at	benenciaries	Provide feedback to	
1 4	Evaluation of	quarterly	physical and		panchayat level		District Panchayat	
	Projects	progress	financial		and provide		District i affellayat	
	Trojects	2.Conduct			feedback to State			
		midterm and	progress		Governments			
		impact evaluation	quarterly		Governments			
		mipaci evaluation						

## **C.Functionaries:**

S.	Union	State	District	Local Government				
	Government	Government	Administration					
1	M&T Division	Agriculture	Agencies	Panchayati Raj system				
	of DAC&FW	Department	implementing	Zilla Parishad	Intermediate Panchatyat	Village Panchayat		
		of State	Action Plan	State Government to devolve		State Government to devolve		
		Government		functionaries as per		functionaries as per activities		
				activities to be implemented		to be implemented under		
				under SMAM		SMAM		

Annexure-II

## COST NORMS AND PATTERN OF ASSISTANCE UNDER SUB MISSION ON AGRICULTURAL MECHANIZATION (SMAM)

Annexure-II (a)

# Component No. 1: Promotion and Strengthening of Agricultural Mechanization through Training, Testing and Demonstration

#### A.Demonstration:

S.N	ITEM		PATTERN OF ASSISTANCE
I	Demonstration of agricultural/equipments at farmers' fields.	horticultural	As per Para 11.1.4 (g) of Operational Guidelines

#### B. Training:

S.N	ITEM	MAXIMUM PERMISSIBLE PROJECT COST	PATTERN OF ASSISTANCE
I	Training of farmers/ users/ stakeholders by State identified institutions, ICAR institutions, ATMA institutions, KVKs under ICAR, National Innovation Foundation, PSUs of GOI, FPOs	Rs.25.0 lakh per	As per Para 11.1.2 of Operational Guidelines

#### C. Testing

S.N	ITEM	MAXIMUM PERMISSIBLE PROJECT COST	PATTERN OF ASSISTANCE
I	Strengthening of designated SAU's/ICAR	Rs. 1.5 crore per centre.	One time grant upto Rs.1.5 crore.
	Institutions/Govt. Agencies for undertaking		
	testing of agricultural equipment		

# COST NORMS AND PATTERN OF ASSISTANCE UNDER SUB MISSION ON AGRICULTURAL MECHANIZATION (SMAM)

Annexure-II (b)

# Component No. 2:Demonstration, Training and Distribution of Post-Harvest Technology and Management (PHTM)

## A .Financial Assistance forPost-HarvestEquipment.

	For SC, ST, Small &Ma Women and NE State	•	For other beneficiary	
Item	Maximum Permissible subsidy per Machine/Equipment per beneficiary	Pattern of Assistance	Maximum Permissible subsidy per Machine/Equipment	Pattern of Assistance
Establishment of PHT units for transfer of primary processing technology, value addition, low cost scientific storage, packaging units and technologies for by-product management in the production catchments.		60% of cost of unit	1.25 lakh	50%

#### **B.** Demonstration:

S.N	ITEM	PATTERN OF ASSISTANCE
I	Demonstration of developed/appropriate Post Harvest Technology	(i) As per Para 11.1.4 (g) of Operational Guidelines

#### C. Training:

S.N	ITEM	MAXIMUM PERMISSIBLE	PATTERN OF ASSISTANCE
		PROJECT COST	
I	Training of farmer, entrepreneurs and scientists in areas related to Post Harvest Technology.	Rs.25.0 lakh per implementing agency	As per Para 11.1.2 of Operational Guidelines

# COST NORMS AND PATTERN OF ASSISTANCE UNDER SUB MISSION ON AGRICULTURAL MECHANIZATION (SMAM) Annexure-II (c)

## Component No. 3: Financial Assistance for Procurement of Agriculture Machinery and Equipment

Type of Agricultural Machinery * , \$	For SC, ST, Small & Margin Women and NE States be		For other beneficiary	
	Maximum Permissible subsidy per Machine/Equipment per beneficiary	Pattern of Assistance	Maximum Permissible subsidy per Machine/Equipment per beneficiary	Pattern of Assistance
Tractors				_
(i) Tractor 2WD (08-20 PTO HP)	Rs. 2.00 lakh	50%	Rs. 1.60 lakh	40%
(ii) Tractor 4WD (08-20 PTO HP)	Rs. 2.25 lakh	50%	Rs. 1.80 lakh	40%
(iii) Tractor 2WD (above 20-40 PTO HP)	Rs. 2.50 lakh	50%	Rs. 2.00 lakh	40%
(iv) Tractor 4WD (above 20-40 PTO HP)	Rs. 3.00 lakh	50%	Rs. 2.40 lakh	40%
(v) Tractor 2WD (above40-70 PTO HP)	Rs. 4.25 lakh	50%	Rs. 3.40 lakh	40%
(vi) Tractor 4WD (above40-70 PTO HP)	Rs. 5.00 lakh	50%	Rs. 4.00 lakh	40%
Power Tillers				
(i) Power Tiller (below 8 BHP)	Rs. 0.65 lakh	50%	Rs. 0.50 lakh.	40%
(ii) Power Tiller (8 BHP & above)	Rs. 0.85 lakh	50%	Rs. 0.70 lakh.	40%
Rice Transplanter		1		•
Self-Propelled Rice Transplanter( 4 rows)	Rs.1.50 lakh	50%	Rs. 1.20 lakh	40%
Self-Propelled Rice Transplanter				
(i) above 4-8 rows	Rs. 5.00 lakh.	50%	Rs. 4.00 lakh	40%
(ii) above 8-16 rows	Rs. 8.00 lakh.		Rs. 6.50 lakh	
Self Propelled Machinery				
Self-Propelled Machinery				
(i) Crop Reaper cum Binder (3 wheel)	Rs. 1.75 lakh		Rs. 1.40 lakh	
(ii) Crop Reaper cum Binder (4 wheel)	Rs. 2.50 lakh		Rs. 2.00 lakh	
(iii)Power Weeder (engine operated below 2 bhp)	Rs. 0.25 lakh	50%	Rs. 0.20 lakh	40%
(iv) Power Weeder (engine operated above 2 bhp)	Rs. 0.35 lakh		Rs. 0.30 lakh	
(v) Power Weeder (engine operated above 5 bhp)	Rs.0.63 Lakh		Rs. 0.50 lakh	
Specialized Self Propelled Machinery	D 0.751.11		D 0.601.11	
(i) Crop Reaper	Rs. 0.75 lakh Rs. 0.75 lakh	50%	Rs. 0.60 lakh Rs. 0.60 lakh	40%
(ii) Post Hole Digger/Auger		50%		40%
(iii) Pneumatic/ other Planter	Rs. 0.90 lakh		Rs. 0.70 lakh	
Self-Propelled Horticultural Machinery	Rs. 2.00 lakh		Rs. 1.60 lakh	
(i) Track Trolley	Rs. 2.00 lakh		Rs. 1.60 lakh	
(ii) Nursery Media Filling Machine	Rs. 2.00 lakh	50%	Rs. 1.60 lakh	40%
(iii) Multipurpose Hydraulic System	Rs. 2.00 lakh Rs. 0.50 lakh		Rs. 1.60 lakh Rs. 0.40 lakh	
(iv) Power operated horticulture tools for pruning,	NS. U.SU IAKII		NS. 0.40 IAKII	

budding, grating, shearing etc.

# COST NORMS AND PATTERN OF ASSISTANCE UNDER SUB MISSION ON AGRICULTURAL MECHANIZATION (SMAM)

Annexure-II (c) Contd.

Component No. 3: Financial Assistance for Procurement of Agriculture Machinery and Equipment  Type of Agricultural Equipments **, # For SC, ST, Small & Marginal farmers, For other beneficiary							
Type of Agricultural Equipments ** , #		For SC, ST, Small & Marginal Women and NE States bene Pattern of Assistance	ficiary	For other beneficiary			
		Maximum Permissible subsidy per Machine/Equipment per beneficiary	Pattern of Assistance	Maximum Permissible subsidy per Machine/Equipment per beneficiary	Pattern of Assistance		
Tra	actor/Power Tiller (below 20 BHP) driven equipments.						
		<b>Rs.</b> 0.20 lakh	50%	Rs. 0.16 lakh	40%		
	nd Development, tillage and seed bed						
	ration equipments:						
(i)	MB Plow (Single Bottom)						
(ii)	Disc Plow						
(iii)	Cultivator						
(iv)	Harrow leveler Blade						
(v) (vi)	Cage wheel						
(vi) (vii)	Furrow opener						
(viii)	Ridger						
(ix)	Weed Slasher						
(x)	Furrow opener	Rs.0.40 lakh	50%	Rs. 0.32 lakh	40%		
(xi)	Bund former	No. 10 lakii	3070	1101 010 2 141111			
(xii)	Crust breaker						
(xiii)	Rotopuddler						
(xiv)	Rotocultivator						
(xv)	Power Harrow						
(xvi)	Chisel Plough	Rs. 0.10lakh	50%	Rs. 0.08 lakh	40%		

# COST NORMS AND PATTERN OF ASSISTANCE UNDER SUB MISSION ON AGRICULTURAL MECHANIZATION (SMAM)

Annexure-II (c) Contd.

	Agricultural Equipments **	For SC, ST, Small & Marginal and NE States bene		For other beneficiary		
Tractor/Power Tiller (below 20 BHP) driven equipments.  B. Sowing, Planting, Reaping and Digging Equipments:  (i) Post Hole digger  (ii) Potato Planter  (iii) Potato Digger  (iv) Ground nut digger  (v) Strip till drill (5tines)  (vi) Tractor drawn crop  reaper/reaper cum binder  (vii) Onion harvester  (viii) Rice straw Chopper,  (ix) Raised Bed Planter  (x) Sugar cane cutter/Stripper  planter(5tines)  (xi) Multi crop planter(5tines)  (xii) Ridge furrow planter		Maximum Permissible subsidy per Pattern of Machine/Equipment per beneficiary Assistance		Maximum Permissible subsidy per Machine/Equipment per beneficiary	Pattern of Assistance	
		Rs. 0.30 lakh	50%	Rs. 0.24 lakh	40%	
(i) (ii) (iii)	Pneumatic Planter Pneumatic vegetable transplanter Pneumatic vegetable seeder Plastic Mulch Laying	Rs. 0.50 lakh	50%	Rs. 0.40 lakh	40%	

(v)	Machine Raised Bed Planter with inclined plate planter and shaper attachment. (5-7tines)				
(vi) (vii) (viii)	Seed treating drum Seed cum fertilizer drill(5tines) Aqua ferti seed drill (5- 7tines)	Rs. 0.15 lakh	50%	Rs. 0.12 lakh	40%

# COST NORMS AND PATTERN OF ASSISTANCE UNDER SUB MISSION ON AGRICULTURAL MECHANIZATION (SMAM)

Annexure-II (c) Contd.

Component No.3: Financial Assistance for Procurement of Agriculture Machinery and Equipment					
Type of Agricultural Equipments ** , #	For SC, ST, Small & Marginal farmers, Women and NE States beneficiary		For other beneficiary		
Tractor/Power Tiller (below 20 BHP) driven equipments .	Maximum Permissible subsidy per Machine/Equipment per beneficiary	Pattern of Assistance	Maximum Permissible subsidy per Machine/Equipment per beneficiary	Pattern of Assistance	
C.Inter Cultivation Equipments:  (i) Grass Weed Slasher  (ii) Power Weeder	Rs. 0.25lakh	50%	Rs. 0.20 lakh	40%	
D. Equipments for Residue management/Hay and Forage Equipments:  (i) Sugarcane thrash Cutter (ii) Coconut Frond Chopper, (iii) Straw reaper (iv) Stubble shaver	Rs. 0.25 lakh	50%	Rs. 0.20 lakh	40%	
E. Harvesting & Threshing Equipments (Operated by engine/electric motor below 3 hp and by power tiller, and tractor of below 20 BHP tractor):  (i) Ground Nut Pod Stripper (ii) Thresher (iii) Multi crop Threshers (iv) Paddy Thresher (v) Brush Cutter	Rs. 0.30lakh	50%	Rs. 0.25 lakh	40%	

(vi) Winnowing fan (vii) Maize sheller (ix) Mower (x) Flail Harvester (xi) Mower Shredder (ALL PURPOSE/All crops)				
F. Chaff Cutter (Operated by engine/electric motor below 3 hp and by power tiller, and tractor of below 20 BHP tractor)	Rs. 0.20lakh	50%	Rs. 0.16 lakh	40%

# COST NORMS AND PATTERN OF ASSISTANCE UNDER SUB MISSION ON AGRICULTURAL MECHANIZATION (SMAM)

Annexure-II (c) Contd.

Type of Agricultural Equipments ** , #			For SC, ST, Small & Marginal farmers, Women and NE States beneficiary		iciary
		Maximum Permissible subsidy per Machine/Equipment per beneficiary	Pattern of Assistance	Maximum Permissible Cost subsidy Machine/Equipment per beneficiary	Pattern of Assistance
Tractor (	above20- 35 BHP) driven equipments.				
	l Development, tillage and seed bed				
(i) (ii) (iii) (iv) (v) (vi) (viii) (ix)  (x) (xviii) (xix) (xx)	ion equipments:  MB Plow (Single Bottom Reversible)  Disc Plow  Cultivator  Harrow  Leveler Blade  Cage wheel  Furrow opener  Ridger  Weed slasher  Rotopuddler  Furrow opener  Bund former  Crust breaker  Rotocultivator  Power Harrow	Rs. 0.30 lakh  Rs.0.60 lakh	50%	Rs. 0.25 lakh  Rs. 0.50 lakh	40%
(xxii)	Rotavator upto 5 feet	Rs. 0.35 lakh	50%	Rs. 0.28 lakh	40%
(xxiii)	Chisel Plough	Rs. 0.20 lakh	50%	Rs. 0.16 lakh	40%
(xxiv)	Reversible Hydraulic plough(2 bottom)	Rs. 0.70 lakh	50%	Rs. 0.56 lakh	40%
(xxv)	Reversible Mechanical plough(2 bottom)	Rs. 0.40 lakh	50%	Rs. 0.32 lakh	40%
(xxvi)	Laser Land Leveller	Rs. 2.00 lakh	50%	Rs. 1.60 lakh	40%

# COST NORMS AND PATTERN OF ASSISTANCE UNDER SUB MISSION ON AGRICULTURAL MECHANIZATION (SMAM)

Annexure-II (c)Contd.

Type of Agricultural Equipments ** , #  Tractor (above20- 35 BHP) driven equipments.		For SC, ST, Small farmers, Women and beneficiar	d NE States	For other beneficiary		
		Maximum Permissible subsidy per Machine/Equipment per beneficiary	Pattern of Assistance	Maximum Permissible subsidy per Machine/Equipment per beneficiary	Pattern of Assistance	
B. Sowing,P Equipments (i) (ii) (iii) (iv) (v) (vi) (vii) (viii) (viii) (ix) (x)	Post Hole digger Potato Planter Potato Digger Ground nut digger Tractor drawn crop reaper Onion harvester Raised Bed Planter Sugar cane cutter/Stripper Multi crop planter, Ridge furrow planter	Rs. 0.40 lakh	50%	Rs. 0.32 lakh	40%	
(xi) (xii) (xiii) (xiv)	Seed drill(7 tines) Zero -till multi crop (7 tines) Seed treating drum Seed cum fertilizer drill (7 tines)	Rs. 0.18 lakh	50%	Rs. 0.16 lakh	40%	
(xv) ]	Direct Rice Seeder (DRS)	Rs.0.20	50%	Rs.0.16	40%	

(xvi) Pneumatic Planter (xvii) Pneumatic vegetable transplanter (xviii) Pneumatic vegetable seeder (xix) Plastic Mulch Laying Machine (xx) Aqua ferti seed drill (9tines) (xxi) Raised Bed Planter with inclined plate planter and shaper attachment.	Rs.0.75 lakh	50%	Rs. 0.60 lakh	40%
(xxii) Happy/Turbo Seeder (9 tines)	Rs. 0.728 lakh	50%	Rs. 0.582 lakh	40%

# COST NORMS AND PATTERN OF ASSISTANCE UNDER SUB MISSION ON AGRICULTURAL MECHANIZATION (SMAM)

Annexure-II (c)Contd.

## Component No. 3: Financial Assistance for Procurement of Agriculture Machinery and Equipment

Type of Agricultural Equipments ** , #	For SC, ST, Small & Marginal farmers, Women and NE States beneficiary		For other beneficiary	
Tractor (above20- 35 BHP) driven equipments .	Maximum Permissible subsidy per Machine/Equipment per beneficiary	Pattern of Assistance	Maximum Permissible Cost subsidy Machine/Equipment per beneficiary	Pattern of Assistance
C.Inter Cultivation Equipments:  (i) Grass Weed Slasher  (ii) Power Weeder	Rs. 0.35 lakh	50%	Rs. 0.30 lakh	40%
D. Equipments for Residue management/Hay and Forage and Transport Equipments:				
(i) Sugarcane thrash Cutter	Rs. 0.40 lakh	50%	Rs. 0.30 lakh	40%
(ii) Coconut Frond Chopper,	Rs. 0.40 lakh	50%	Rs. 0.30 lakh	40%
(iii) Rake (small capacity)	Rs. 0.75 lakh	50%	Rs. 0.60 lakh	40%
(iv) Balers(Round) (below14 kg per bale)	Rs. 1.50 lakh	50%	Rs. 1.20 lakh	40%
(v) Straw reaper	Rs. 0.75 lakh	50%	Rs. 0.60 lakh	40%
(vi) Feed block machine(100- 200 kg/hr)	Rs. 1.50 lakh	50%	Rs. 1.20 lakh	40%
(vii) Stubble shaver	Rs. 0.40 lakh	50%	Rs. 0.30 lakh	40%
(viii) Straw Chopper/Shredder/Mulcher Mounted type 5 ft	Rs.0.672 Lakh	50%	Rs. 0.538 lakh	40%
(ix) Trailer/Trolley (upto 3 Tone capacity)	Rs.0.60 lakh	50%	Rs.0.50 lakh	40%
(x) Trailer/Trolley (upto 5 Tone capacity)	Rs.0.75 lakh	50%	Rs.0.60 lakh	40%
(xi) Narrow Rear Rim(One pair) for tractors	Rs.0.07 lakh	50%	Rs.0.056 lakh	40%
D. Harvesting & Threshing Equipments (Operated by engine/electric motor below 5 bhp and by power tiller, and tractor of below 35 BHP tractor				

(i) Ground Nut Pod Stripper (ii) Thresher (iii) Multi crop Threshers (iv) Paddy Thresher (v) Brush Cutter (vi) Maize Sheller (xii) Mower (xiii) Flail Harvester (xiv) Mower Shredder (ALL PURPOSE/All crops)	Rs. 0.40 lakh	50%	Rs. 0.30 lakh	40%
(xv) Crop Reaper cum binder (tractor drawn)	Rs. 1.25 lakh	50%	Rs. 1.0 lakh	40%
F. Chaff Cutter (Operated by engine/electric motor above 3- 5 HP and by power tiller and tractor of below 35 BHP)	Rs. 0.28 lakh	50%	Rs. 0.22 lakh	40%

# COST NORMS AND PATTERN OF ASSISTANCE UNDER SUB MISSION ON AGRICULTURAL MECHANIZATION (SMAM)

Annexure-II (c)Contd.

	For SC, ST, Small & Ma Women and NE State		For other beneficiary	
Type of Agricultural Equipments ** , #	Maximum Permissible subsidy per Machine/Equipment per beneficiary	Pattern of Assistance	Maximum Permissible Cost subsidy Machine/Equipment per beneficiary	Pattern of Assistanc e
Tractor (above 35 BHP) driven equipments.				
A. Land Development, tillage and seed bed preparation equipments:  (i) MB Plow (ii) Disc Plow (iii) Cultivator (iv) Harrow (v) Leveler Blade (vi) Cage wheel (vii) Furrow opener (viii) Ridger	Rs. 0.50 lakh	50%	Rs. 0.40 lakh	40%
(ix) Laser Land Leveller	Rs. 2.00 lakh	50%	Rs. 1.60 lakh	40%
(x) Rotavator				
a) 5 feet	Rs. 0.42 lakh	50%	Rs. 0.34 lakh	40%
b) 6 feet	Rs. 0.448 lakh	50%	Rs. 0.358 lakh	40%
c) 7 feet	Rs. 0.476 lakh	50%	Rs. 0.381 lakh	40%
d) 8 feet	Rs. 0.504 lakh	50%	Rs. 0.403 lakh	40%
(xi) Roto-puddler	Rs. 1.00 lakh	50%	Rs. 0.80 lakh	40%
(xii) Reversible Hydraulic plough(2 bottom)	Rs. 0.70 lakh	50%	Rs. 0.56 lakh	40%
(xiii) Reversible Hydraulic plough(3 bottom)	Rs. 0.895 lakh	50%	Rs. 0.716 lakh	40%
(xiv) Reversible Mechanical plough(2 bottom)	Rs. 0.40 lakh	50%	Rs. 0.32 lakh	40%
(xv) Reversible Mechanical plough(3 bottom)	Rs. 0.50 lakh	50%	Rs. 0.40 lakh	40%
(xvi) Sub –Soiler	Rs.0.55 lakh	50%	Rs. 0.45 lakh	40%

(xvii)	Trench makers (PTO operated)	Rs. 1.50 lakh	50%	Rs. 1.20 lakh	40%
(xviii)	Bund former (PTO operated)	Rs. 1.50 lakh	50%	Rs. 1.20 lakh	40%
(xix)	Backhoe Loader Dozer (Tractor operated)	Rs. 3.50 lakh	50%	Rs. 2.80 lakh	40%
(xx)	Furrow opener	Rs. 0.30 lakh	50%	Rs. 0.25 lakh	40%
(xxi)	Bund former	Rs. 0.30 lakh	50%	Rs. 0.25 lakh	40%
(xxii)	Crust breaker	Rs. 0.35 lakh	50%	Rs. 0.30 lakh	40%
(xxiii)	Rotocultivator	Rs. 1.00 lakh	50%	Rs. 0.80 lakh	40%
(xxiv)	Power Harrow (PTO operated)	Rs. 1.00 lakh	50%	Rs. 0.80 lakh	40%

# COST NORMS AND PATTERN OF ASSISTANCE UNDER SUB MISSION ON AGRICULTURAL MECHANIZATION (SMAM)

Annexure-II (c)Contd.

Type of Agricultural Equipments ** ,#		For SC, ST, Small & Ma Women and NE State		For other bene	eficiary
ractor	(above 35 BHP) Drivenequipments.	Maximum Permissible subsidy per Machine/Equipment per beneficiary	Pattern of Assistance	Maximum Permissible Cost subsidy Machine/Equipment per beneficiary	Pattern of Assistance
3. Sowin	g, Planting, Reaping and Digging Equipments:				
(i)	Raised Bed Planter	Rs.0.35		Rs.0.30	
(ii)	Seed drill/zero till seed drill (9tines and above)	Rs.0.20		Rs.0.16	
(iii)	Potato Digger	Rs.0.40		Rs.0.35	
(iv)	Tractor drawn crop reaper	Rs.0.75		Rs.0.60	
(v)	Onion harvester	Rs.0.80		Rs.0.65	
(vi)	Seed cum fertilizer drill/Zero till Seed cum fertilizer drill		50%		40%
	a) 9 tines	Rs.0.213		Rs.0.170	
	b) 11 tines	Rs.0.241		Rs.0.193	
	c) 13 tines	Rs.0.269		Rs.0.215	
	d) 15 tines	Rs.0.280		Rs.0.224	
(vii)	Direct Rice Seeder (DRS)	Rs.0.20		Rs.0.16	
(viii) (ix) (x) (xi) (xii) (xiii)	Post Hole digger Potato Planter (automatic) Ground nut digger Sugar cane cutter/Stripper/planter, multi crop planter (9 tines and above) zero –till multi crop planter (9 tines and above)	Rs. 0.75 lakh	50%	Rs. 0.60 lakh	40%

(xv) Happy/Turbo Seeder (9 tines)	Rs. 0.728 lakh	50%	Rs. 0.582 lakh	40%
(xvi) Happy/Turbo Seeder (10 tines)	Rs. 0.756 lakh	50%	Rs. 0.605 lakh	40%
(xvii) Happy/Turbo Seeder (11 tines)	Rs. 0.784 lakh	50%	Rs. 0.627 lakh	40%
(xviii) Super Seeder	Rs. 1.05 lakh	50%	Rs. 0.84 lakh	40%
(xix) Pneumatic Planter (xx) Pneumatic vegetable transplanter, (xxi) Pneumatic vegetable seeder	Rs. 2.25 lakh	50%	Rs. 1.80 lakh	40%
(xxii) Cassava Planter(9 tines and above)	Rs. 0.75 lakh	50%	Rs. 0.60 lakh	40%
(xxiii) Manure spreader	Rs. 0.75 lakh	50%	Rs. 0.60 lakh	40%
(xxiv) Fertilizer Spreader – PTO operated	Rs. 0.75 lakh	50%	Rs. 0.60 lakh	40%
(xxv) Plastic Mulch Laying Machine	Rs. 0.75 lakh	50%	Rs. 0.60 lakh	40%
(xxvi) Automatic rice nursery sowing machinery	Rs. 1.75 lakh	50%	Rs. 1.40 lakh	40%
(xxvii) Aqua ferti seed drill (9 tines and above)	Rs. 0.75 lakh	50%	Rs. 0.60 lakh	40%
(xxviii)Raised Bed Planter with inclined plate planter and shaper attachment.	Rs. 0.90 lakh	50%	Rs. 0.70 lakh	40%
(xxix) Battery Operated Fertilizer Spreader/Broadcaster (Capacity 3-5 Litre)	Rs. 0.031 lakh	50%	Rs. 0.025 lakh	40%

## COST NORMS AND PATTERN OF ASSISTANCE UNDER SUB MISSION ON AGRICULTURAL MECHANIZATION (SMAM)

Annexure-II (c)Contd.

Component No.3: Financial Assistance for Procurement of Agriculture Machinery and Equipment						
Type of Agricu	ltural Equipments ** , #	For SC, ST, Small & Margi Women and NE States b		For other beneficiary		
Tractor (above 35 BHP) driven equipments.		Maximum Permissible subsidy per Machine/Equipment per beneficiary	Pattern of Assistance	Maximum Permissible Cost subsidy Machine/Equipment per beneficiary	Pattern of Assistance	
	ation Equipments:					
• /	Weed Slasher,	Rs.0.75 Lakh	50%	Rs. 0.60 lakh	40%	
(ii) Weeder	(PTO operated)	Rs.0.75 Lakh	50%	Rs. 0.60 lakh	40%	
by engine/elec above 35 BHP	,					
(ii) Threshe	Nut Pod Stripper r/Multi crop Threshers upto 4 ur. capacity	Rs.1.00 Lakh	50%	Rs. 0.80 lakh	40%	
(iii) Paddy T						
(iv) Chaff Cu						
(v) Forage I	Harvester					
(vi) Maize Si	heller					
(vii) Crop Re	aper cum Binder (tractor drawn)	Rs.1.50 Lakh	50%	Rs. 1.20 lakh	40%	
(viii) Combine cutter b	e Harvester (self-propelled, upto 14 feet ar) \$	Rs.8.00 Lakh	50%	Rs. 6.40 lakh	40%	
	e Harvester (Tractor operated (without upto 10 feet cutter bar) \$	Rs.3.00 Lakh	50%	Rs. 2.40 lakh	40%	
(x) Combin	e Harvester (track, 6-8 feet cutter bar) \$	Rs.11.00 Lakh	50%	Rs. 8.80 lakh	40%	
(xi) Combine bar) \$	e Harvester (track, below 6 feet cutter	Rs.7.00 Lakh	50%	Rs. 5.60 lakh	40%	
tonne/h	r/Multi crop Threshers above 4 ar capacity	Rs.2.5 Lakh	50%	Rs. 2.00 lakh	40%	
(xiii) Infielder		Rs.0.63 lakh	50%	Rs.0.50 lakh	40%	
(xiv) Mower		Rs.1.00 Lakh	50%	Rs. 0.80 lakh	40%	

(xv)	Flail Harvester				
(xvi)	Mower shredder (All Purpose/All crops				
(xvii)	Cotton Pluckers (12 V battery)	Rs.0.035 Lakh	50%	Rs. 0.028 lakh	40%
	ipments for Residue management/Hay and Forage				
Equip					
(i)	Sugarcane thrash Cutter,				
(ii)	Coconut Frond Chopper,	Rs.0.63 Lakh	50%	Rs. 0.50 lakh	40%
(iii)	Hay Rake	Rs.1.50 Lakh	50%	Rs. 1.20 lakh	40%
(iv)	Balers (Round) (14-16 kg per bale)	Rs.2.00 Lakh	50%	Rs. 1.60 lakh	40%
(v)	Balers (Round) (above 16-25 kg per bale)	Rs.5.50 Lakh	50%	Rs. 4.40 lakh	40%
(vi)	Balers (Round) (180-200 kg per bale)	Rs.9.00 Lakh	50%	Rs. 7.20 lakh	40%
(vii)	Baler (Rectangular 18-20 kg per bale)	Rs.6.00 Lakh	50%	Rs. 4.80 lakh	40%
(viii)	Wood chippers	Rs.1.25 Lakh	50%	Rs. 1.00 lakh	40%
(ix)	Sugarcane ratoon manager	Rs. 1.25 Lakh	50%	Rs. 1.00 lakh	40%
(x)	Cotton stalk uprooter	Rs.0.75 Lakh	50%	Rs. 0.60 lakh	40%
(xi)	Straw reaper	Rs.1.30 Lakh	50%	Rs. 1.04 lakh	40%
(xii)	Feed block machine (above 200 kg/hr)	Rs.3.00 Lakh	50%	Rs. 2.40 lakh	40%
(xiii)	Stubble shaver	Rs.0.80 Lakh	50%	Rs. 0.64 lakh	40%
(xiv)	Straw Chopper/shredder/Mulcher				
	a) Mounted type 5 ft	Rs.0.672 Lakh	50%	Rs. 0.538 lakh	40%
	b) Mounted type 6 ft	Rs.0.728 Lakh	50%	Rs. 0.582 lakh	40%
	c) Mounted type 7 ft	Rs.0.784 Lakh	50%	Rs. 0.627 lakh	40%
	d) Mounted type 8 ft	Rs.0.840 Lakh	50%	Rs. 0.672 lakh	40%
	e) Trailed type	Rs.1.26 Lakh	50%	Rs. 1.01 lakh	40%
	f) Combo type	Rs.1.40 Lakh	50%	Rs. 1.12 lakh	40%
(xv)	Super Straw Management System (Super SMS) to be attached with Combine harvester	Rs.0.56 Lakh	50%	Rs. 0.45 lakh	40%
(xvii)	Shrub Master/Cutter cum spreader	Rs.0.25 Lakh	50%	Rs. 0.18 lakh	40%
(xviii	) Rotary Straw Slasher	Rs.0.25 Lakh	50%	Rs. 0.18 lakh	40%
(xix)	Briquette Making Machine (upto 100 kg/hr capacity)	Rs.2.90 Lakh	50%	Rs. 2.32 lakh	40%
(xx)	Briquette Making Machine (500-1000 kg/hr capacity)	Rs.5.00 Lakh	50%	Rs. 4.00 lakh	40%

#### COST NORMS AND PATTERN OF ASSISTANCE UNDER SUB MISSION ON AGRICULTURAL MECHANIZATION (SMAM)

Annexure-II (c) Contd.

Component No.3: Financial Assistance for Procurement of Agriculture Machinery and Equipment						
Type of Agricultural Equipments ** , #	For SC, ST, Small & Mar Women and NE States	rginal farmers,	For other benefi			
	Maximum Permissible subsidy per Machine/Equipmentper beneficiary	Pattern of Assistance	Maximum Permissible Cost subsidy Machine/Equipmentper beneficiary	Pattern of Assistance		
All manual /animal drawn equipment/implements/Tools						
A.Land Development , tillage and seed bed						
preparation equipments:						
(i) MB Plow						
(ii) Disc Plow						
(iii) Cultivator	Rs. 0.10 lakh	50%	Rs. 0.08 lakh	40%		
(iv) Harrow	RS. 0.10 lakii	3070	Rs. 0.08 fakif	4070		
(v) leveler Blade						
(vi) Furrow opener						
(vii) Ridger						
(viii) Puddler						
B. Sowing and Planting Equipments:						
(i) Paddy planter,						
(ii) seed cum fertilizer drill,						
(iii) Raised Bed Planter,						
(iv) planter,	Rs. 0.10 lakh	50%	Rs. 0.08 lakh	40%		
(v) Dibbler	10. 0.10 14111	0070	110. 0.00 14111	1070		
(vi) Equipments for raising paddy nursery						
(vii) Marker for SRI						
(viii) Seed treating drum						
(ix) Rice-wheat seeder						
(x) Drum Seeder (Below 4 Row)	Rs. 0.03lakh	50%	Rs. 0.025 lakh.	40%		
(xi) Drum Seeder (Above 4 Row)	Rs.0.04 lakh	50%	Rs. 0.030 lakh	40%		
(xii) Manual Fertilizer Spreader / Broadcaster	Rs.0.0075 lakh	50%	Rs. 0.006 lakh	40%		
C. Harvesting & Threshing Equipments:	Rs.0.10 lakh	50%	Rs. 0.08 lakh	40%		
(i) Ground Nut Pod Stripper						
(ii) Thresher						
(iii) Winnowing fan						

	DF SM/		

(iv) Tree climber				
(v) Horticulture Hand tools				
(vi) Maize sheller				
(vii) Feed block machine				
(viii) Spiral grader				
(vi) Chaff Cutter (upto 3')	Rs. 0.05lakh	50%	Rs. 0.04 lakh	40%
(vii) Chaff Cutter (above 3')	Rs.0.063 lakh	50%	Rs. 0.05 lakh	40%
D. Inter Cultivation Equipments:				
(i) Grass Weed Slasher,				
(ii) Weeder,	Rs. 0.012lakh	50%	Rs. 0.010 lakh	40%
(iii) Cono Weeder				
(iv) Garden Hand Tools				

# SUB MISSION ON AGRICULTURAL MECHANIZATION (SMAM) 2020-21

Component No. 3: Financial Assistance for Procurement of Agriculture Machinery and Equipment

Hort	ticultural/Post Harvest Technology Equipments	For SC,ST, small & marg women, and NE States		For other beneficiary	
\$,&		Maximum Permissible subsidy per Machine/Equipment	Pattern of Assistance	Maximum Permissible Cost subsidy per Machine/Equipment	Pattern of Assistance
i.	PROPELLED/OTHER POWER DRIVEN HORTICULTURAL MACHINERY Chain Saw /Wheel Barrow /Mango Grader/Planterand other suitable self- propelled machineries and equipments for horticulture crops.	Rs.0.75 lakh	50%	Rs.0.60lakh	40%
Manu	al Horticultural equipments				
	uluminium Ladder/Ladder Uuminium Pole	Rs.0.15 lakh	50%	Rs.0.12 lakh	40%
	lucker	KS.U.13 lakii	3070	RS.U.12 IARII	TO 70
Post-l Equip	Harvest Equipments for food grains , Oilseedsand Horticultural oments		I.		
additi	lishment of PHT units for transfer of primary processing technology, value on, low cost scientific storage, packaging units and technologies for by- ct management in the production catchments.	Rs.1.80lakh	60%	Rs.1.50 lakh	50%
(i)	Mini Rice Mill	Rs.2.40 lakh	60%	Rs.2.00 lakh	50%
(ii)	Mini Dal Mill	Rs.1.50 lakh	60%	Rs.1.25 lakh	50%
(iii)	Millet Mill	Rs.5.40 lakh	60%	Rs.4.50 lakh	50%
(iv)	Oil Mill with filter press(for all types of Horticulture/Food grain/oilseed crop)	Rs.3.00 lakh	60%	Rs.2.50 lakh	50%
(v)	Extractor (for all types of Horticulture/Food grain/oilseed crop )	Rs.1.80 lakh	60%	Rs.1.50 lakh	50%
(vi)	Pomegranate Aril Extractor	Rs.1.80 lakh	60%	Rs.1.50 lakh	50%
(vii)	Custard Apple Pulper (for all types of Horticulture/Food grain/oilseed crop)	Rs. 1.80 lakh	60%	Rs.1.50 lakh	50%
(viii)	Dehydration unit/Pricking Machine/Humidifier (for all types of Horticulture/Food grain/oilseed crop )	Rs.1.80 lakh	60%	Rs.1.50 lakh	50%
(ix)	Packing Machines(for all types of Horticulture/Food grain/oilseed crop	Rs.3.00 lakh	60%	Rs.2.40 lakh	50%
(x)	All types of Power driven Dehuskar /sheller /Threshers /Harvesters / De-spiking/ Deconing Machine/Peeler/ Spliter /Stripper(for all type of Horticulture / food grain/oil seeds Crops)	Rs.0.75 lakh	60%	Rs.0.60 lakh	50%
(xi)	All types of Boiler/Steamer/Drier (for all types of Horticulture/Food grain/oilseed crop)	Rs.1.00 lakh	60%	Rs.0.80 lakh	50%
(xii)	All types of Solar Driers (for all type of Horticulture / food grain/oil seeds Crops) with floor area of about 400 to 1000 sq.feet.	Rs.3.50 lakh	60%	Rs.3.00 lakh	50%
(xiii)	All types of Washing Machines(for all types of Horticulture/Food grain/oilseed crop)	Rs.0.60 lakh	60%	Rs.0.50 lakh	50%
(xiv)	All types of Grinder/Pulveriser/Polisher (for all types of Horticulture/Food grain/oilseed crop)	Rs.0.60 lakh	60%	Rs.0.50 lakh	50%
(xv)	All types of Cleaner cum Grader/ Gradient separator /specific gravity separator (for all types of horticulture/Food grain/oilseed crop)	Rs.1.00 lakh	50%	Rs.0.80 lakh	40%

## COST NORMS AND PATTERN OF ASSISTANCE UNDER SUB MISSION ON AGRICULTURAL MECHANIZATION (SMAM)

Annexure-II (c)Contd.

Component No. 3: Financial Assistance for Procurement of Agriculture Machinery and Equipment						
		For SC, ST, Small & Ma Women and NE State		For other beneficiary		
Type of Agricultural Equipments ** , \$		Maximum Permissible subsidy per Machine/Equipment per beneficiary	Pattern of Assistance	Maximum Permissible Cost subsidy Machine/Equipment per beneficiary	Pattern of Assistance	
Plant protection equipments						
` '	nual sprayer: Knapsack/foot/Battery operated ayer.	Rs.0.0075 lakh	50%	Rs. 0.006 lakh.	40%	
(b) Sola	r Operated Knapsack Sprayer	Rs.0.018 lakh	50%	Rs. 0.015 lakh.	40%	
	rered Knapsack sprayer/Power Operated sprayer pacity 8 - 12 lts):( < 0.75 hp engine)	Rs. 0.031 lakh	50%	Rs. 0.025 lakh	40%	
	rered Knapsack sprayer/Power Operated sprayer pacity above 12- 16 lts): ( > 0.75 to 1.00 hp ine)	Rs.0.038 lakh	50%	Rs. 0.03 lakh	40%	
(cap	wered Knapsack sprayer/Power Operated sprayer pacity above 16lts ( > 1.0 hp engine)	Rs.0.10 lakh	50%	Rs. 0.08 lakh	40%	
(> 1.	veredKnapsack Mist blower sprayer cum Duster .0 hp engine)					
(g) Tra	ctor Operated Sprayer (air carrier/assisted)	Rs.1.25 lakh	50%	Rs. 1.00 lakh	40%	
(h) Tra	ctor Operated Sprayer (boom type ):	Rs.0.37 lakh	50%	Rs. 0.28 lakh	40%	
(i) Eco	Friendly Light Trap	Rs.0.015 lakh	50%	Rs. 0.012 lakh	40%	
	ctor Operated Electrostatic Sprayer	Rs.2.50 lakh	50%	Rs. 2.00 lakh	40%	
( )	d Scarer	Rs.0.75 lakh	50%	Rs. 0.60 lakh	40%	
	d Agricultural Machinery					
bioa	ar operated/electric operated animal deterrent acoustics equipment (with solar panel)	Rs.0.35 lakh	50%	Rs. 0.28 lakh	40%	
	ar operated/electric operated Animal deterrent acoustics equipment (without solar panel)	Rs.0.25 lakh	50%	Rs. 0.20 lakh	40%	
500	chine for rising nursery of various crops ( below kg capacity)	Rs.3.00 lakh	50%	Rs. 2.40 lakh	40%	
	ar operated/electric operated Hydroponic chine for rising nursery of various crops (500 kg above capacity)	Rs.6.00 lakh	50%	Rs. 4.80 lakh	40%	

#### PTO - Power Take Off

- \*Illustrative list of the equipments tested from FMTTIs & other designated Institutes may be referred at www.farmech.gov.in
- \*\*All tested equipments from either FMTTIs or designated Institute from DAC are only eligible for subsidy in all states under Government assisted programme
- # These Agricultural Implements authorized to test at designated Institute from DAC&FW.
- \$ These Agricultural machineries authorized to test at FMTTIs.
- & Designated Institutes notified for special equipments by separate notification by DAC&FW.
  - Any extra equipment proposed by States would be considered by DAC&FW under the appropriate category of assistance
  - Please also refer para 11.1.3 for details on guidelines of testing.
  - The cost subsidy applicable will be limited to the %age of the cost of the machine fixed or max. permissible subsidy per machine as indicated above, whichever is lower.

# COST NORMS AND PATTERN OF ASSISTANCE UNDER SUB MISSION ON AGRICULTURAL MECHANIZATION (SMAM)

Annexure-II (c)Contd.

Component 3: Financial Assistance for procurement of Agril. Machinery & Equipments

Туре	of Agriculture Equipment	For SC,ST,Small & marginal Farmers, women and NE states beneficiaries
Irriga	tion Pumps	
(a)	Petrol /Diesel/Electric/Tractor PTO operated/portable irrigation pumps upto 15 hp (with ISI/BEE labeled with Minimum 4 Star rated) \$\$	Rs. 10,000/unit or 50% of cost whichever is less  Rs. 8,000/unit or 40% of cost whichever is less
(b)	Deep well <b>(Submersible)</b> / Shallow wellSolar photovoltaic (SPV) Water pumping systems with A.C / DC Induction Motor pump Set and a suitable inverter @ , \$\$	As per Ministry of New and Renewable Energy (MNRE), Govt.of India normsprevailing.
(c)	Remote motor operators for Electric Pump-sets	50% limited to Rs.0.07 lakh  40% limited to Rs. 0.05 lakh

\$\$ Capital subsidy is applicable on the system cost inclusive of installation, commissioning, transportation, insurance 5 years maintenance and taxes wherever applicable.

@The pumps which will be supplied under Subsidy programmes must qualify as per IEC standard and performance as per the conditions laid down in the guidelines of MNREand tested and approved by one of IEC/NABL/MNRE accredited test labs

- (i) National Institute of Solar Energy, Gurgaon.
- (ii) Electronic Quality and Development Center, Ahmedabad

The similar Programme of Ministry of New and Renewable Energy, Government of India, is also implemented by the State Renewable Agency of respective States. To avoid the duplicity Agricultural Department of State Government may also consult to the State Renewable Agencies while selecting the beneficiary. The list of the beneficiary may be exchanged time to time within both the departments.

# COST NORMS AND PATTERN OF ASSISTANCE UNDER SUB MISSION ON AGRICULTURAL MECHANIZATION (SMAM)

Annexure-II (d)

#### Component No. 4:Establishment of Farm Machinery Banks for Custom Hiring:

I	Establishment of Farm Machinery Banks for Custom Hiring						
S.N	ITEM	MAXIMUM PERMISSIBLE PROJECT COST	PATTERN OF ASSISTANCE				
A	Procurement subsidy for establishment of Custom Hiring Centreupto 10 lakh	Project based	40% limited to Rs. 4.00 lakh,whichever is less.@#				
В	Procurement subsidy for establishment of Custom Hiring Centre upto 25 lakh	Project based	40% limited to Rs. 10.00 lakh,whichever is less.@#				
С	Procurement subsidy for establishment of Custom Hiring Centre upto 40 lakh	Project based	40% limited to Rs. 16 .00 lakh,whichever is less.@#				
D	Procurement subsidy for establishment of Custom Hiring Centreupto 60 lakh	Project based	40% limited to Rs. 24.00 lakh,whichever is less.@#				

@# :The maximum permissible assistance per machine under the project will be as per the assistance indicated against each machine in Annexure –II (c) and for other machines which are not indicated in the list of Annexure –II (c), it will be 40% of the machine cost .The sample sheets of project cost calculations and allowable financial assistance is given in **Annexure - XI** 

# COST NORMS AND PATTERN OF ASSISTANCE UNDER SUB MISSION ON AGRICULTURAL MECHANIZATION (SMAM)

Annexure-II (e)

#### Component No. 5:Establishment of Hi-Tech, High Productive Equipment Hub for Custom Hiring

S.N	ITEM	MAXIMUM PERMISSIBLE PROJECT COST	PATTERN OF ASSISTANCE
A	Procurement subsidy for establishment of Custom Hiring Centreupto 100 lakh	Project based	40% limited to Rs. 40 lakh,whichever is less. @#
В	Procurement subsidy for establishment of Custom Hiring Centreupto 150 lakh	Project based	40% limited to Rs. 60 lakh,whichever is less. @#
С	Procurement subsidy for establishment of Custom Hiring Centreupto 200 lakh	Project based	40% limited to Rs. 80 lakh,whichever is less. @#
D	Procurement subsidy for establishment of Custom Hiring Centreupto 250 lakh	Project based	40% limited to Rs. 100 lakh,whichever is less. @#

@#:The maximum permissible assistance per machine under the project will be as per the assistance indicated against each machine in Annexure –II (c) and for other machines which are not indicated in the list of Annexure –II (c), it will be 40% of the machine cost. The sample sheets of project cost calculations and allowable financial assistance is given in **Annexure - XI** 

Annexure-II (f)

#### Component No. 6:- Promotion of Farm Mechanisation in Selected Villages

S.N		ITEM			MAXIMUM PERMISSIBLE PROJECT COST	PATTERN OF ASSISTANCE
I	Financial	assistance	for	Farm	Upto Rs.10 lakhs per Farm	80% limited to Rs. 8.00 lakh, whichever is less.
	Machinery	Banks			Machinery Bank	

# COST NORMS AND PATTERN OF ASSISTANCE UNDER SUB MISSION ON AGRICULTURAL MECHANIZATION (SMAM)

#### Annexure-II (g)

Component No. 7:Financial Assistance for Promotion of Mechanized Operations/hectare Carried out

S.N	ITEM	MAXIMUM PERMISSIBLE PROJECT COST	PATTERN OF ASSISTANCE	Norms for Intervention
I	(a) Hiring Charges to farmer members of Farm Machinery Banks set up under component (6)	Upto a maximum of 2 ha area as per following norms  (i) For tractor/power operated operations – Rs. 2000/ha per farmer per year  (ii) For animal drawn mechanized operations- Rs. 1000/ha per farmer per year  (iii) For manual operations – Rs. 750/ha per farmer per year	50% of the cost of operation/ha	Selection of villages from districts with low productivity in Cereals, Pulses & Oilseeds identified in other Missions for demonstrations  One time hiring assistance to farmer members of the farm machinery banks set up under component (6)
	(b) Field Demo by CHCs	Minimum 120 ha/season per Custom Hiring Centre	Rs. 2000/ha	Demonstration charges to custom hiring centres set up under Component (4). These demonstrations will be limited to 120 ha/village

#### Annexure-II (h)

## Component No. 8:Promotion of Farm Machinery and Equipment in North-Eastern Region

S.N	ITEM	MAXIMUM PERMISSIBLE PROJECT COST	PATTERN OF ASSISTANCE (Project Based)	Norms for Intervention
I	(a) Financial assistance for procurement of machinery/implements	Upto Rs.1.25 lakhs per beneficiary	100% of cost of machinery/implement/equipment	8 North Eastern States to take up this on project basis with Cooperative Societies, Registered Farmer
	(b) Financial assistance for Farm Machinery Banks for	Upto Rs.10 lakhs per Farm Machinery Bank	95% of cost of Farm Machinery Banks.	Societies, FPOs and Panchayatsin order to encourage good agricultural

group of far	mers	practices in specific crops/areas.

#### Annexure-III

# FORMULA TO CALCULATE FARM POWER AVAILABILITY (kW/ha) (Number of agricultural Worker x 0.05+Number of draught animal x 0.38 +Number of Tractors x 26.1+ Number of Power tillers x 5.6 + Number of electric motor x 3.7 + Number of diesel engine x 5.6)÷ Available cultivated land in ha

#### ANNEXURE-IV-A

# LIST OF TRAINING PROGRAMMES CONDUCTED AT THE FARM MACHINERY TRAINING & TESTING INSTITUTES

S1. No.		Name of the Course	Duration	Training Charges per person per course
I.		EVEL COURSES:		
	U1	Appropriate Mechanization Technology for Energy Management in Agriculture	4 weeks	
	U2	Selection, Operation, Safety and Maintenance of Improved Agricultural Machinery	6 weeks	
	U3	Operation, maintenance and Management of power tiller	2 weeks	
	U4	Training Program on Agro Processing & value addition Equipments	2 weeks	
	U5	Gender friendly Equipments for Women farmers	3 days	
	U6	Utilization of Non-conventional Energy Sources in Agriculture.	1 week	
	<b>U7</b>	Water Management Through sprinkler and drip Irrigation & Water saving devices.	1 week	
	U8	Selection, Operation, and Maintenance of Plant Protection Equipments	1 week	FREE
	U9	Selection, Operation, and Maintenance of improved Harvesting & Threshing machines	2 weeks	
	U10	Selection, Operation, and Maintenance of Hand Pump	1 week	
	U 11	Selection, operation and maintenance of agril. Machinery for dry land agriculture.	2 week	
	U12	Crop Specific Machines:	I.	
	a)	Package of Agricultural machinery for Paddy cultivation.		
	b)	Package of Agricultural machinery for Maize cultivation.		
	c)	Package of Agricultural machinery for Vegetable cultivation.		
	d)	Package of Agricultural machinery for Sugarcane cultivation.	1 week	FREE
	e)	Package of Agricultural machinery for Horticulture & Medicinal crops cultivation.	each	r Ree
	f)	Package of Agricultural machines for oil seed and pulse crop		
	g)	Package of Agricultural machinery for forage/fodder production and fodder management.		
	U13	Information Technology application in farm mechanization		

		TECHNICIAN LEVEL COURSES:					
	A. Courses on Repair and Overhauling						
	T1	Repair and overhauling of Stationery engines and tractors	6 weeks	s Rs. 300/-			
	T2	Repair & overhauling of power tillers	2 weeks	s Rs. 100/-			
	Т3	Establishment and management of agricultural machinery repair and maintenance workshop	4 week	s Rs. 200/-			
	T4	Study & Repair of Hydraulic system in Agriculture Machines.	4 weeks	s Rs. 200/-			
	Т5	Repair and maintenance of Auto Electrical equipments and Battery re-conditioning	3 week	s Rs. 150/-			
	Т6	Repair, maintenance & rewinding of Electrical motors, and submersible pumps for agricultural use		s Rs.150/-			
	Т7	Operation & maintenance of Land shaping and Development machinery		,			
	Т8	Repair, maintenance & overhauling of diesel pumping sets					
	Т9	Combine Harvesters and Straw Reaper.	3 weeks	s Rs. 150/-			
		While Learning Courses:					
	TEL-1	Repair and overhauling of Stationery engines, tractors and diesel pumping sets.	6 month	Rs. 200/-			
	TEL-2	Repair & overhauling of power tillers	6 month	Rs. 200/-			
	TEL-3	Establishment and management of agricultural machinery repair and maintenance workshop	6 month	Rs. 200/-			
	TEL-4	Repair and maintenance of Auto Electrical equipments, Battery re-conditioning, Rewinding of electrical motors and submersible pumps.		Rs. 200/-			
	TEL-5	Maintenance, repair and installation of Combine Harvesters and Straw Reaper.	6 month	Rs. 200/-			
	MANAGEMENT LEVEL COURSES: (for trainees sponsored by the commercial organizations / Banks/ Manufacturer						
	M1		week	Rs. 2500/			
	M2	Agriculture Machinery Management 1	week	Rs. 2500/			
	мз	Export Management of Agricultural 1 Machinery.	week	Rs. 2500/			
	М4	Instrumentation for Farm Machinery Testing and Evaluation	1week	Rs. 2500/			
	м5	Entrepreneurship development to establish custom hiring agro-service centre	8weeks	Rs. 20000/ (Except farmers)			

	М6	Farm machinery management for dealers / traders / manufacturers, etc.	1week	Rs. 2500/	
IV	ACADEMIC LEVEL TRAINING PROGRAM				
	A1	Trg. program on Farm Power & Machinery for Degree/Diploma Engg.Students. (4 weeks)	4 weeks		
	A2	Practical Training programme on Farm Power and Machinery for ITI & 10 +2 vocational students (4 weeks)	4 weeks	Rs. 2000/- per course/month	
V	NB	Need based Training Programme on Mechanization	As per requirem ent of the Sponsori ng agency.	Rs. 1000/- per month (Except Farmers)	
VI	FN	Training programme for Foreign National as per requirements under Bilateral programme	10 to 18 weeks (As per requirem ent of the Sponsori ng agency)	As per Govt. policy	
VII		TECHNOLOGY TRANSFER CAMPS - OFF CAMPUS			
	TT1	Energy conservation & safety in farm machinery	1 – 2 days	Free	
	TT2	Familiarization and demonstration of improved/modern agril. Machines.	1 – 2 days	Free	

## **ANNEXURE-IV-B**

Skill Development Programmes aligned to NSQF and notified by ASCI in the area of Farm Machinery for 12 Job Roles, eligible for financial assistance as per common funding norms of MSDE.

Qualification Pack Title	QP ID.	Proposed NSQF level	Entry requirements	Total hours
Tractor operator	AGR/Q1101	4	Class X	200
Harvesting Machine Operator		4	Class X	200
	AGR/Q1102			
Agriculture Machinery Operator	AGR/Q1103	4	Class 8 preferably	200
Agriculture Machinery Repair and Maintenance Service Provider	AGR/Q1111	5	Class 12 preferably	200
Custom Hiring Service Provider	AGR/Q1112	5	Class 12 preferably	200
Irrigation Service Technician	AGR/Q1104	4	Class 8 preferably	200
Operator-Reaper Thresher and Crop Residue Machinery	AGR/Q1105	4	Class 8 preferably	220
Service and Maintenance Technician-Farm Machinery	AGR/Q1106	4	Class 10 preferably	205
Agriculture Machinery Demonstrator	AGR/Q1107	5	Class 10 preferably	200
Tractor Mechanic	AGR/Q1108	4	Class 10 preferably	220
Farm Workshop Foreman/Supervisor	AGR/Q1109	5	ITI or Class 10 preferably	200
Farm Workshop/Service Manager	AGR/Q1110	6	B.Tech/ B.E / Graduate in Business Administration	200

#### Annexure-V

List of institutions approved by the Department of Agriculture, Cooperation & Farmers Welfare, Ministry of Agriculture& Farmers Welfare, Government of India for Testing and Certifying Agricultural Machineries and Equipments

S. No.	Name of the State	Name of the Institute			
1	BIHAR	Faculty of Agricultural Engineering, Rajendra Agriculture University, <b>PUSA (BIHAR)</b>			
2	CHHATTISGARH	State level Agriculture Implement Testing Centre, Directorate (Agricultural Engineering), Agriculture Department, Govt. of Chhattisgarh, TeliBandha, Gorav Path, <b>RAIPUR (CHHATTISGARH)</b>			
3	DELHI	Division of Agricultural Engineering, Indian Agricultural Research Institute, <b>NEW DELHI-12.</b>			
4	GUJARAT	College of Agricultural Engineering & Technology, Junagarh Agricultural University, <b>JUNAGARH (GUJARAT)</b>			
5	HARYANA	College of Agricultural Engineering & Technology, ChoudharyCharan Singh Agriculture University, <b>HISSAR</b>			
6	JAMMU &	Sher-e-Kashmir University of Agri. Science & Technology, <b>SRINAGAR REGION (J. &amp; K.)</b>			
7	KASHMIR	Sher-e-Kashmir University of Agri. Science & Technology, <b>JAMMU REGION (J. &amp; K.)</b>			
8		Birsa Agriculture University, Kanke, RANCHI (JHARKHAND)			
9	JHARKHAND	Jharkhand Agriculture Machinery Testing and Training Centre (JAN			
10		University of Agricultural Sciences, Gandhi KrishiVignyan Kendra, BANGALORE (KARNATAKA.)			
11		College of Agricultural Engineering, University of Agricultural Sciences, <b>RAICHUR, KARNATAKA - 584104</b>			
12	KARNATAKA	College of Agriculture Vijaypur, University of Agricultural Sciences Belgaum Rd, Krishi Nagar, Dharwad, Karnataka 580005			
13		Farm Machinery Testing Centre, College of Food Technology, University of Horticultural Sciences, Udyanagiri, Navanga, Bagalkot (Karnataka) - 587104			
14	KERALA	Farm Machinery Testing Centre, Kerala Agricultural University Kelappaji College of Agricultural Engineering & Technology Tavanur, Malappuram (Dist), Kerala- 679573			
15	MADHYA	Central Institute of Agricultural Engineering, Berasia Road, <b>BHOPAL</b>			
16	PRADESH	College of Agricultural engineering, Jawaharlal Nehru Krishi Vishvidyalaya, <b>Jabalpur (Madhya Pradesh)</b>			
17		Dr. A.S. College of Agricultural Engineering Mahatma Phule Krishi Vidyapeeth, Rahuri, Distt. Ahmednagar, Maharashtra (MPKV)			
18		Farm Machinery Testing, Training and Production Centre, Department of Farm Power and Machinery, <b>Dr. PDKV, Akola,</b>			
18	MAHARSHTRA	College of Agricultural Engineering and Technology, Dr. Balasaheb Sawant Konkan Krishi Vidyapeeth, <b>DAPOLI (MAHARSHTRA)</b>			
20		College of Agricultural Engineering, V. N. Marathwada Krishi Vidyapeeth, <b>PARBHANI (MAHARASHTRA)</b> -431402			

Annexure-V (Contd.)

S. No.	Name of the State	Name of the Institute				
21	ORISSA	College of Agricultural Engineering and Technology, Orissa University of Agriculture and Technology, <b>BHUBANESWAR</b>				
22	Department, Government of Odisha, Bhubaneswar, Odish					
23	PUNJAB  Agriculture University, LUDHIANA (PUNJAB)  Central Institute of Post-Harvest Engineering and Technology					
24						
25		Farm Implements and Machinery Testing & Training Centre, Central Workshop, Swami Keshwanand Rajasthan Agricultural University,				
	RAJASTHAN	Bikaner (Rajasthan).				
26		College of Technology and Agricultural Engineering, MaharanaPratap, University of Agriculture and Technology, UDAIPUR (RAJASTHAN)				
27	SIKKIM	College of Agricultural Engineering and Post-Harvest Technology, RANIPOOL, GANGTOK(SIKKIM)				
28	TAMIL NADU	Agricultural Engineering Collage & Research Institute (AEC&RI) , Tamil Nadu Agricultural University, <b>Kumulur , Trichy (TAMIL NADU)</b>				
29	TAMIL NADO	Farm Machinery Testing Center, ICAR-Central Institute of Agricultural Engineering- Regional Center, near AMRC, <b>Coimbatore</b> -641003				
30	TELANGANA	Prof. Jayashanker Telengana State Agriculture University, Hydrabad				
31	UTTAR PRADESH	State Level Farm Machinery Training and Testing Institute, Govt. of U.P., Rehmankhera, <b>LUCKNOW (U.P.)</b>				
32	OTTAK T KADESII	Sam Higginbottom Institute of Agriculture, Technology & Science (AAI), Deemed University, <b>ALLAHABAD (U.P.)</b>				
33	UTTARANCHAL	College of Technology, Gobind Ballabh Pant University of Agriculture and Technology, <b>PANTNAGAR (UTTARANCHAL)</b>				
34		Department of Agriculture & Food Engineering, Indian Institute of Technology, <b>KHARAGPUR (WEST BENGAL.)</b>				
35	WEST BENGAL	State Farm Machinery Training-cum-Testing Institute, Faculty of Agricultural Engineering, Bidhan Chandra KrishiViswavidyalaya (BCKVV), <b>Mohanpur, DISTT. NADIA (WEST BENGAL)</b>				

S1.	Item	Testing charges (Rs.)	GST
No.			
<b>-0</b>   0			
70 1 2	a p e		

1	Components	16154	
2	Hand tools	16154	
3	Power operated thresher, decorticator, Sheller, winnowers etc.	64566	
4	Animal drawn equipments	34443	As may be
5	Tractor drawn/ operated implements/ equipments	109775	applicable
6	Manually operated equipment	24310	
7	Power tiller driven/ self-propelled reaper etc.	64566	
8	Tractor drawn / operated seed cum fertilizer drill/ planter, straw reaper, Mini rice mill, Power seed cleaner/ Grader	115146	
9	Animal drawn Multi tool bar (Minimum for attachments)	91465	
10	Self-Propelled paddy transplanter	157117	
11	Power Operated Multi-crops thresher (Two or more crops)	118383	
12	Samples received from Private Manufactu (Other than the samples under BIS Centr scheme)		
	a) IC Engines with Kerosene/LPG	29718	As may be
	b) Pumpset (Engine + Pump) with Kerosene/LPG	56078	applicable
	c) Pumpset without engine	26884	
	d) Knapsack Sprayer IS: 3906 (Private sample)	36916	
	e) Power Sprayer IS: 2548 (Private sample)	96933	
	<ul> <li>All the testing charges in respect of items a 15% at the end of each financial year.</li> <li>Testing Charges are subject to revision from the GST and Cess as per the prevailing ratabove testing fee.</li> </ul>	m time to time	-

Annexure-VI

Testing Charges (01.04.2020 to 31.03.2021)

# Testing Charge for the Post-Harvest Technology Equipments and machinery (01.04.2020 to 31.03.2021).

S.NO	Name of the Machine/equipments	Testing Charges (Rs)			
		Operated	Operated	Operated	
		with	with	with fuel	
		Electricity	Tractor		
1	Grain Dryer ( Stationary/Mobile) (Capacity 1-5 t/h)	244541	283745	251800	
2	Seed/Grain Cleaner	118217	-	-	
	/Grader/Cleaner cum grader				
	/Destoner, Mobile Grain				
	Cleaner/Grader(Capacity up to 2				
	t/h)				
3	Mini dhal Mill(Capacity up to 150 kg/h)	118217			
4	Grain cleaner cum Dryer with or	244541	283745	251800	
•	without treater(Capacity 1-5 T/h)	211311			
5	Pop Corm machine ( capacity up to	44770			
	100 pkt/h)	44770			
6	Potato/Banana Chips Making	44770			
U	machine( capacity up to 100 kg/h)	44770			
7	Mini rice mill/ Double Rubber	125477		132737	
/	sheller/ Air Cooled polisher cum	125477		102/07	
	Broken separator( capacity up to				
	1t/h)				
8	Mini oil expeller/ extraction plant	150510			
0	(ie. Oil seed such as soybean,	158510			
	mustered, ground nut, sunflower				
_	etc. (capacity up to 500 kg/h)	4400==			
9	Areca nut Dehuskar( capacity up to	110957			
4.0	500 kg/h)				
10	Chilli/ Masala Pounding Machine.	52030			
	(capacity up to 20 kg/h)				
11	Hammer Beater type Pounding	77440			
	machine (capacity up to 100 kg/h)				
12	Flour Mill machine ( Attrition/Burr Mill) ( capacity up to 50 kg/h)	60137			
13	Grinding Mill( capacity up to 300 kg/h)	118217			
14	Rawa suji Grinding machine Plate type( capacity up to 20 kg/h)	48158			
15	Sugar cane crusher having double roller (capacity up to 200 litre/h)	45980			
16	Sugar cane crusher having triple roller (capacity up to 1000 litre/h)	118217			
17	Papad/ Roti/ Chapati rolling/	48158			
	making machine or with electricity (	(manual			
	capacity up to 300 number /h)	operated			
		also)			
10	Semi-Automatic   Papad/Roti/			140240	
18	Chapati plant ( capacity up to 100	124267			
				Operated with Gas	
	kg/h)				
				and	
10	Vormicalli Machina ( caracitus t-	50001		electricity	
19	Vermicelli Machine ( capacity up to 50 kg/h)	58201			
L	00 115/11/	l .	l .	i	

#### Note

- 1. To test the machine on Additional Crops, extra @40% test fee over and above the original test fee shall be charged.
- 2. The Raw material required for test shall be arranged by the applicant at his own cost as per the requirement of the parameters.
- 3. The above testing charges shall be applicable w.e.f. date of issue of order.
- 4. The testing charges shall be revised annually. The testing charges shall be enhanced by 10% over the test fee prevailing in the previous year. The enhanced test fee shall be applicable w.e.f. 1st day of the fiscal year. The enhanced test fee shall not be made applicable on those machines which have been admitted for test before the 1st day of the fiscal year.
- 5. The Service Tax and Cess as per the prevailing rates would be extra over and above the above testing fee.
- 6. Once the machine is submitted for test with all necessary test fees and subsequently if the manufacturer/applicant withdraws the machine from test, there shall be no refund of the test fee deposited.

## Testing charges for the Tractors / Power Tillers / Combine Harvesters w.e.f. 1<sup>st</sup> April, 2020

S. No.	Name of the Machine(s)	Revised testing fee, (Rs.)	GST (Rs.)		
1.	Tractors:				
	Initial Commercial Test (ICT)	841044	As may be applicable		
	40% of test fee of ICT	336418			
	75% of test fee of ICT	630783			
	90% of test fee of ICT	756940			
	Confidential Test (ICT Fees + 10% higher)	925148			
	Conversion of nature of test from confidential to commercial	420522			
	Batch Test:	841044			
	OECD Test:	499865			
	The fees charged by the OECD for approval of each test report shall be extra.				
2.	Power Tillers:	_			
	Initial Commercial Test (ICT)	412587	As may be applicable		
	Batch Test	412587			
3.	Combine Harvesters:				
	Self-propelled*	420522			
	*The fee is without engine test. If the e of full test fee shall be charged.	e, then additional test fee of 40%			
	Tractor powered	420522	As may be applicable		
4.	Emission:				
	Engines of Tractors, power tillers, combine harvesters and other self-propelled machines	174555	As may be applicable		
5.	Type Approval of machines under <b>CMVR:</b>				
	Tractor	158688	As may be applicable		
	Power Tiller	126950	v 11		
	Combine Harvester	126950			
	Tractor Trailer	Not applicable			
	Amendment / Extension / Corrigendum to existing CMVR Certificates	79344			

#### Note:

- \* The revised fee will be effective from the date of issue of this order for a period of three years or till further order of revision.
- The machines which are under test on or after the date of applicability of the order, the fee will be charged at the revised/new rates.

Annexure-VII

Sub Mission on Agricultural Mechanization (SMAM)
Format for Annual Action Plan (SEPRTAE UNDER GEN/SCP/TSP COMPONENT)

Name of State:

Financial Year:

**Nodal Department:** 

**Background Information**:

FARM POWER AVAILIBITY (kW/ha):

Main Crops: Type of Soil:

S.N	Component	Approved pattern of assistance	Estimated Cost	Central Share
i)	Demonstrations			
1	Total no. of Demonstrations (i) Cropping pattern based deoms= (ii) New technology machines/equipments demos=	As per Para 11.1.4 (g) of Operational Guidelines		
ii.	Training			<u>.</u>
1	Total no. of courses to be conducted and No. of trainees to be trained under each course  (i) U1-U13=  (ii) T1-T9=	As per Para 11.1.2 of Operational Guidelines		
iii.	Augmenting the facilities and infrastruc	cture for testing Cer	itres	
1	Total No. of Centres to be strengthened	Rs. 150 lakhs		
Comp	Cost (A):i+ii+iii= conent No.2: Demonstration, Training	max. per institution	of Post-Harve	st Technology as
Comp Mana	oonent No.2: Demonstration, Training gement (PHTM)	institution	of Post-Harve	st Technology as
Comp Mana	ronent No.2: Demonstration, Training gement (PHTM) nonstrations  Total Area to be covered under demonstrations  (i) Cropping pattern based demos = (ii) New technology	institution	of Post-Harve	st Technology as
Comp Mana i.Den	ronent No.2: Demonstration, Training gement (PHTM) nonstrations  Total Area to be covered under demonstrations  (i) Cropping pattern based demos = (ii) New technology machines/equipments demos =	and Distribution of As per Para 11.1.4 (g) of Operational	of Post-Harve	st Technology an
Comp Mana i.Den	ronent No.2: Demonstration, Training gement (PHTM) nonstrations  Total Area to be covered under demonstrations  (i) Cropping pattern based demos = (ii) New technology machines/equipments demos =	and Distribution of As per Para 11.1.4 (g) of Operational	of Post-Harve	st Technology as
Comp Mana i. Den 1	Total Area to be covered under demonstrations  (i) Cropping pattern based demos = (ii) New technology machines/equipments demos = ining  Total no. of courses to be conducted and No. of trainees to be trained under	institution  and Distribution of the control of the		st Technology as

#### Total Cost (B):i+ii+iii=

(c) Component No.3: Financial Assistance for Procurement of Agriculture Machinery and

Equi	ipm	ent
------	-----	-----

S.N	Component		Pattern of Assistance	Estimated Cost	Central Share	State Share
1	Name of machines to be procured	No. of machines to be procured	As per Annexure-II (c)			
	Tractor					
	Power tiller					
	self-propelled machines					
	Tractor driven implements					
	animal/manu al drawn machines					
	PP Manual					
	PP Power					

#### Total Cost (C):

(D) Component No. 4: Farm Machinery Banks for Custom Hiring

1	Total no. of farm machinery Banks	Pattern of Assistance	Estimated Cost	Central Share	State Share
	machinery banks		Cost	Silare	
a)	Linto 10 lolph -	40% limited to Rs. 4			
	Upto 10 lakh =	lakh, whichever is less.			
b)	Heta OF Jolsh -	40% limited toRs. 10			
	Upto 25 lakh =	lakh, whichever is less.			
c)	Upto 40 lakh =	40% limited to Rs. 16			
	Opto 40 lakii -	lakh, whichever is less.			
d)	Upto 60 lakh =	40% limited to Rs. 24			
	Opto oo takii -	lakh, whichever is less.			

#### Total Cost (D):

(E) Component No.5:Hi-Tech, High Productive Equipment Hub for Custom Hiring

1	Total no. of Hubs	Pattern of	Estimated	Central	State Share
		Assistance	Cost	Share	
a)		40% limited to Rs.			
	Upto 100 lakh =	40 lakh, which ever			
		is less.			
b)		40% limited to Rs.			
	Upto 150 lakh =	60 lakh,whichever			
		is less.			
c)		40% limited to Rs.			
	Upto 200 lakh =	80 lakh, which ever			
		is less.			
d)		40% limited to Rs.			
	Upto 250 lakh =	100 lakh, whichever			
		is less.			

#### Total Cost (E):

(F)Component No.6:Promotion of Farm Mechanisation in Selected Villages								
1	No. of Farm	Pattern of Assistance	Estimated	Central	State Share			
	Machinery Banks		Cost	Share				
		80% of the limited to						
		Rs. 8.00 lakhs per						
		village, whichever is less.						

Total Cost (F):

(G)Component No.7:Financial Assistance for Promotion of Mechanized Operations/hectare Carried out Through Custom Hiring Centres

	Intervention	Pattern of	Estimated	Central Share	State
		Assistance	Cost		Share
a)	Operational Charges to farmer members of Farm Machinery Banks set up under component (6) – Type of Operation & Area to be covered under each operation	50% of the cost of operation/ha limitedto (i) Rs. 2000/ha per farmer per year for tractor/power operated operations (ii) Rs. 1000/ha per farmer per year for animal drawn mechanized operations and (iii) Rs. 750/ha per farmer per year for manual operations, whichever is less.			
b)	No. of Field Demo by CHCs	Rs. 2000/ha with a minimum of120 ha/season per CHC			

Total Cost (G):

(H) Con	(H) Component No.8:Promotion of Farm Machinery and Equipment in North-Eastern States								
S.N	Intervention	Pattern of Assistance	Estimated	Central	State				
			Cost	Share	Share				
a)	Financial assistance for procurement of machinery/implements  Name of No. of machines to be procured to be procured  Tractor  Power tiller self-propelled machines  Tractor driven implements animal/manu al drawn machines	100% of cost of machinery/implement/eq uipmentupto Rs.1.25 lakhs per beneficiary, whichever is less.							
	PP Manual PP Power								
b)	Financial assistance for Farr Machinery Banks for group of farmers								

Total Cost (H):					
(I) Flexi Funds:					
1 Local Initiatives					
(25% of the approved outlay)					
Total Cost (I)	·				
J. Management/Administrative Cost (<5%):					
Total Cost $(A+B+C+D+E+F+G+H+I+J)=$					
Total Central Share=					
Total State Share=					

Annexure-VIII (A)

#### FORM GFR 12-C

(See Government of India's Decision (i) below rule 239)
Form of Utilization Certificate (FOR STATE GOVERNMENTS
(Where expenditure incurred by Govt. bodies only)

SI. No	Letter No. & Date	Amount	
			Certified that out of Rsof grants sanctioned during the yearin favour ofunder the Ministry/ Department Letter No. given in the margin and Rson account of unspent balance of the previous year, a sum of Rs
	Total		

2. Certified that I have certified myself that the conditions on which the grant-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.

Kind of checks exercised.

•	١.
1	١
_	,

2)

3)

Signature:	
Name:	

Designation:----

PS: The UC shall disclose separately the actual expenditure incurred and loans and advance given to the suppliers of stores and assets, to construction agencies and like in accordance with scheme guidelines and in furtherance to the scheme objectives, which do not constitute expenditure at the stage. These shall be treated as utilized grants but allowed to be carried forward.

Annexure-VIII (B)

FORM GFR 12-A [(See Rule 238 (1)]

#### FORM OF UTILIZATION CERTIFICATE FOR AUTONOMOUS BODIES OF THE GRANTEE ORGANIZATION

UTILIZATION CERTIFICATE FOR THE YEAR..... in respect Of recurring/non-recurring GRANTS-IN-AID/SALARIES/CREATION OF CAPITAL ASSETS Name of the Scheme.....

- 1.
- Whether recurring or non-recurring grants..... 2.
- Grants position at the beginning of the Financial year 3.
  - (i) Cash in Hand/Bank
  - (ii) Unadjusted advances
  - (iii) Total
- 4. Details of grants received, expenditure incurred and closing balances: (Actuals)

Unspent	Interest	Interest	Grant rec	eived d	uring the	Total	Expenditure	Closing
Balances	Earned	deposited	year		Available	incurred	Balances	
of	thereon	back to the				funds		(5-6)
Grants		Government				(1+2-		
received						+3+4)		
years								
[Figure								
as at Sl.								
No. 3								
(iii)]								
1	2	3		4		5	6	7
			Sanction	Date	Amount			
			No.					
			<i>(</i> 1)		,,,,,			
			(i)	(ii)	(iii)			
				ı	1			

Component wise utilization of grants:

Grant-in-aid- General	Grant-in-aid- Salary	Grant-in-aid-creation of capital assets	Total

Details of grants position at the end of the year

- (i) Cash in Hand/Bank
- (ii) Unadjusted Advances
- (iii) Total

Certified that I have satisfied myself that the conditions on which grants were sanctioned have been duly fulfilled/are being fulfilled and that I have exercised following checks to see that the money has been actually utilized for the purpose for which it was sanctioned:

- (i) The main accounts and other subsidiary accounts and registers (including assets registers) are maintained as prescribed in the relevant Act/Rules/Standing instructions (mention the Act/Rules) and have been duly audited by designated auditors. The figures depicted above tally with the audited figures mentioned in financial statements/accounts.
- (ii) There exist internal controls for safeguarding public funds/assets, watching outcomes and achievements of physical targets against the financial inputs, ensuring quality in asset creation etc. & the periodic evaluation of internal controls is exercised to ensure their effectiveness.
- (iv) To the best of our knowledge and belief, no transactions have been entered that are in violation of relevant Act/Rules/standing instructions and scheme guidelines.
- (v) The responsibilities among the key functionaries for execution of the scheme have been assigned in clear terms and are not general in nature.
- (vi) The benefits were extended to the intended beneficiaries and only such areas/districts were covered where the scheme was intended to operate.
- (vii)The expenditure on various components of the scheme was in the proportions authorized as per the scheme guidelines and terms and conditions of the grants-in-aid.
- (viii) It has been ensured that the physical and financial performance under.................. (Name of the scheme has been according to the requirements, as prescribed in the guidelines issued by Govt. of India and the performance/targets achieved statement for the year to which the utilization of the fund resulted in outcomes given at Annexure I duly enclosed.
- (ix) The utilization of the fund resulted in outcomes given at Annexure II duly enclosed (to be formulated by the Ministry/Department concerned as per their requirements/specifications.) (ix) Details of various schemes executed by the agency through grants-in-aid received from the same Ministry or from other Ministries is enclosed at Annexure –II (to be formulated by the Ministry/Department concerned as per their requirements/specifications).

Date:	Signature:
	Name: Designation:
Place:	
Signature	
Name	
Chief Finance Officer	
(Head of the Finance)	(Strike out inapplicable terms)

Annexure-IX (A)

## Sub Mission on Agricultural Mechanization (SMAM) Format for Quarterly / Annual Progress Report

Name of State: Financial Year: Nodal Department:

S.N	Components	Activities	Target Approved by D	AC&FW	Quar	terly /Annua	al Progress	Report
						Achievements for		ments till
				l n:		r I/II/III		March
			Physical	Financial	Physical	Financial	Physical	Financial
1	Promotion and Strengthening of	a) Trainees trained in U1- U13 courses	No. of Trainees					
	Agricultural Mechanization	b) Trainees trained in T1-T9 courses	No. of trainees					
	through Training, Testing and	c) Institution strengthened for testing	Name of the inst.					
	Demonstration	d)Demonstration on cropping system based approach	Area covered (ha), Type of equipments and Type of cropping system					
		e) Demonstration of new technology equipments/ machines	Type of equipments and Area covered (ha)					
2	Demonstration,	a) Name & No. of courses	No. of Trainees trained					
	Training and distribution of Post-	b)Demonstration of PHT	Name of technology &Area in ha					
	Harvest Technology and Management (PHTM)	c) Establishment of Post- Harvest Technologies	Name and No. of technologies established					
3	Financial Assistance	Type of machines	No. of machines					
	for Procurement of	a) Tractor	procured					
	Agriculture Machinery	b) Power tiller						
	and Equipment	c)self-propelled machines						
		d) Tractor driven						
		implements						
		e) Animal/manual drawn						
		machines						
		f) PP Manual						
		g) PP Power						

4	Establish Farm Machinery Banks for Custom Hiring	Size of FM Bank Upto 10 lakh Upto 25 lakh Upto 40 lakh Upto 60 lakh	No. of Banks established			
5	Establish Hi-Tech, High Productive Equipment Hub for Custom Hiring	Size of Hi-tech Hub Upto 100 lakh Upto 150 lakh Upto 200 lakh Upto 250 lakh	No. of Hubs established			
6	Promotion of farm mechanisation in selected villages	Farm Machinery Banks established	No. of Banks			
7	Financial Assistance for promotion of Mechanized operations/hectare	a) Operational Charges to the farmer members of Farm Machinery Banks set up under component (6)	Name of the operation and area covered (ha)			
	carriedout through custom hiring Centres	b) Demonstrations by CHCs under component (7)	Name of the equipment & No. of Field Demo organized and area covered			
8	Promotion of farm machinery and equipment in North- Eastern States	Type of machines  a) Tractor b) Power tiller c)self-propelled machines d) Tractor driven implements e) Animal/manual drawn machines f) PP Manual g) PP Power	No. of machines procured  No. of Banks			
		Farm Machinery Banks for group of farmers	established			
9	Flexi Funds(Local Initiatives)	Type of local initiatives				
10	Management/Adminis trative Cost (≤1%): Total:					

Annexure -X

The Educational Qualification/Experience and the duties/ responsibilities that may be assigned to the above stated additional manpower may be as under:

Level and	Educational Qualification &	Duties and Responsibilities			
Post	Experience				
Consultant	Degree in Agricultural Engineering. At least 15 years' experience in Agricultural Mechanization preferably in handling the schemes/ programmes of mechanization at National level	<ol> <li>To provide technical guidance on matters related to interventions proposed in the Sub-Mission. To develop standardized formats of action plans</li> <li>To assist State in planning, formulation of action plans, whenever required.</li> <li>To provide technical assistance to M&amp;T Division staff in scrutinizing the action plans received from the States.</li> <li>To Establish time-lines and indicators for completion of each activity</li> <li>To supervise the quality of implementation of various interventions proposed in the Mission</li> <li>To assist senior officers in synchronizing and synergizing with other divisions of DAC; State governments; State agriculture Universities; ICAR research institutions and other stake holders on technical front.</li> <li>To analyze the data received from various States and to come up with suggestions wherever improvements are required in the execution of the activities.</li> <li>Documentation and dissemination of contribution of various interventions</li> <li>To render overall help to the technical staff working in the M&amp;T Division.</li> <li>To perform other tasks specified by the Joint Secretary (M&amp;T)</li> </ol>			
Senior Programmer	Master's degree in Computer Science from recognized university/ institutes with 4 years' experience in developing web based applications and independently handling of projects	<ol> <li>To develop web-based application software for effective implementation and monitoring the components of Sub-Mission.</li> <li>Updating the website.</li> <li>Guidance to the States for development of application software for implementing the sub-Mission</li> </ol>			

Technical Assistant (Programming)	Bachelor degree in Computer Science from recognized university/ institutes with at least one year experience in developing web based applications.	Assist Senior Programmer for performing the duties and responsibilities assigned to him.
Technical Assistant	Degree in Agricultural Engineering with one year experience of working in farm mechanization projects/ schemes	1. To procure, compile and analyze the State wise data relating to the proposed interventions of the Mission activities.
(Farm Mechanization)		2. To maintain relevant records/ file and data of the various Mission activities.
		3. To assist in developing uniform formats for submission of action plans; monitoring and evaluation formats.
		4. To assist in scrutinizing the action plans for the interventions proposed.
		5. To undertake field visits to assess the progress of the Mission activities.
		6. To assist officers of the M&T Division on all technical matters.
		7. To undertake other works assigned from time to time.
Data Entry	Graduate with six months'	1. To enter the data in the web-based application software.
operator	computer course. Minimum	2. Attend computer typing work
	one year experience in	
	relevant field of work	
Attendant/ Peon	Matriculate	To attend Officers in the M&T Division for file movements, photocopying and miscellaneous works.

Annexure - XI

# Sample sheets of project cost calculations and allowable financial assistance for establishing Custom Hiring Centres.

Project cost of CHC upto Rs. 60 lakhs

S.No.	Name of the equipment/ machines	No. of machines/ equipment	Unit cost of machine/ Equipment (Rs. in lakhs)	Total cost of machines/ Equipment (project) (Rs. in lakhs)	Rate of financial assistance	Maximum permissible subsidy limited to as per Annexure II (c) (Rs. in lakhs)
1.	Super Straw Management System (Super SMS) to be attached with Combine Harvester	01	1.20	1.20	40%	0.45
2.	Happy Seeder (10 tine)	01	1.60	1.60	40%	0.605
3.	Paddy Straw Chopper (combo)	01	2.90	2.90	40%	1.12
4.	Paddy Mulcher (7ft)	01	1.65	1.65	40%	0.627
5.	Hydraulically Reversible M.B. Plough (3 bottom)	01	1.90	3.80	40%	1.432
6.	Rotary Slasher	02	0.55	1.10	40%	0.36
7.	Tractor (4WD, 38 PTO HP)	02	6.50	13.0	40%	4.80
8.	Laser land leveler	01	4.25	4.25	40%	1.60
9.	Reaper cum binder (self-propelled, 3 wheel)	01	3.75	3.75	40%	1.40
10.	Mini Rice Mill	01	5.0	5.0	40%	2.00
11.	Mini Dal Mill	01	3.0	3.0	40%	1.25
	Total			41.25		15.64