# **OPERATIONAL GUIDELINES**

FOR

# **CENTRAL SECTOR SCHEME**

# POST HARVEST TECHNOLOGY AND MANAGEMENT



Government of India Ministry of Agriculture Department of Agriculture & Cooperation (Mechanization & Technology Division) Krishi Bhavan, New Delhi-110 001

#### CENTRAL SECTOR SCHEME ON POST HARVEST TECHNOLOGY AND MANAGEMENT

#### **1.** Background of the Scheme:

One of the Thrust Areas approved by Prime Minister's Office (PMO) for the Department of Agriculture & Cooperation is regarding "Reforming Agricultural Markets & Promoting Post Harvest Technology". Keeping this in view the department has decided that a new scheme to promote Post Harvest Technology should be taken up for implementation during the XI Five Year Plan. The basic aim of the scheme is to create adequate infrastructure in the production catchments/rural areas for primary processing and value addition so as to reduce the post harvest losses on the farm to mop up surpluses at farm level and ensure fair price for the producer including availability of the produce in the production catchments itself at a reasonable price for the consumers in these areas. The scheme will focus on lower end of the spectrum of post harvest management and processing that are not covered under the Ministry of Food Processing programmes or under the National Horticulture Mission.

Under the scheme, the technologies developed by ICAR, CSIR and those identified from within the country and abroad for primary processing, value addition, low cost scientific storage/transport of cereals, pulses, oilseeds, sugarcane, vegetables and fruits and the crop bi-product management shall be given thrust. The suggestive list of technologies developed by CSIR and ICAR is given at Annexure I and II respectively.

The main components of the scheme are as under:

- Establishment of units for transfer of primary processing technology, value addition, low cost scientific storage, packaging units and technologies for bi-product management in the production catchments under tripartite agreement.
- (ii) Establishment of low cost Post Harvest Technology (PHT) units/supply of PHT equipments with Government assistance.
- (iii) Demonstration of technologies.
- (iv) Training of farmers, entrepreneurs and scientists.

#### 2. Operational Guidelines:

- 2.1 Establishment of units for transfer of primary processing technology, value addition, low cost scientific storage, packaging units and technologies for bi-product management in the production catchments under tripartite agreement.
  - (i) The units utilizing the available post harvest technologies and management, value addition, scientific storage, packaging technologies and technologies for bi-product management for animal feed and compost developed by ICAR, CSIR and those identified from within the country and abroad for primary processing of cereals, pulses, oilseeds,

sugarcane, vegetables like potato, onion and fruits like banana, Jute, cotton etc apart from their low cost scientific storage (cool chambers for fruits and vegetables and transit storage for cereals, pulses, oilseeds and other agricultural produce), temperature controlled vans for transport of perishable farm produce shall be established in the production catchments under the tri-partite agreement of State Government, ICAR/CSIR and Self Help Group (SHG)/User Groups (UG) of farmers/Cooperative Societies of Farmers/Non-Governmental Organizations (NGOs).

- (ii) The committee constituted with the involvement of Engineer/or his representative of the AICRP Centres of ICAR and Centres of CSIR, Officer of the State Department of Agriculture/ATMA at the District, Lead Bank Officer in the district, Representative of KVK from the District will jointly identify the beneficiaries under the scheme. The representative of the ICAR Centres will be the Member Secretary of the committee and he shall be responsible for organizing the meeting of the committee. The selection criteria may be based on the land holding, cropping pattern of that area and also the potential for post harvest processing and marketing. The technologies/package of technologies to be established will also be identified by these centres of ICAR and CSIR.
- (iii) These centres in association with the State Department of Agriculture will select SHG/UG of farmers/ Cooperative Societies of Farmers/NGOs in that area who are ready to make investment of 60% cost of the project and is ready to enter into a tri-partite agreement.
- (iv) The CSIR/ICAR centres will prepare a Project Proposal indicating background of the project, objectives, broad outcomes with justification etc. The proposal will include cost of equipment, minimum required civil construction and assistance for quality certification (Agmark etc.) for establishment of such units under the tri-partite agreement of State Government, ICAR/CSIR/SAUs and SHG/UG of farmers/ Cooperative Societies of Farmers/NGOs.
- (v) The Government shall release funds on the basis of agreement.
- (vi) The agreement would be signed by the SHG/UG of farmers/Cooperative Societies of Farmers/ NGOs/Entrepreneurs, ICAR Centres and the State Government before the project proposal is implemented.
- (vii) Such units shall be established in the production catchments with 40% assistance from the Government of India and remaining 60% coming from beneficiary i.e. SHG/UG of farmers/Cooperative Societies of Farmers/ NGOs/Entrepreneurs.
- (viii) These units shall be operated by the Self Help Group (SHG)/ User Groups (UG) of farmers/Cooperative Societies of Farmers/NGOs in association with the assistance from All India Coordinated Research Projects on Post Harvest Technology Centres of ICAR, CSIR institutes, Extension Centres/ATMA and State Agricultural Universities. After its successful establishment and operation for a period of one year these units shall be transferred fully to the Self Help Group (SHG)/ User Groups (UG) of farmers/Cooperative Societies of Farmers/NGOs in those production

catchments for its independent operation. ICAR shall withdraw at this stage.

- (ix) The financial assistance (subsidy) from the Government of India in such cases shall be routed through the Technical Institution of ICAR which shall enter into the tri-partite agreement. However, the maximum subsidy may be 40% of the total project cost, limited to Rs.4.00 lakh.
- (x) The amount of subsidy shall only be released after the proposal is approved by the Government of India.
- (xi) While releasing the funds, the Implementation and Monitoring Committee shall ensure that 16% of the total available funds are allotted to the SC beneficiaries, 8% of the funds to the ST beneficiary and 30% of the funds to the woman beneficiaries.

# 2.2 Establishment of low cost Post Harvest Technology (PHT) units/supply of PHT equipments with Government assistance.

- (i) In order to create adequate infrastructure with the farmers for low cost primary processing and value addition, the available technologies not requiring higher initial investments shall be established at farmer's fields.
- (ii) The technologies involving initial project investment upto Rs.2.00 lakh may be opted by individual farmer.
- (iii) The committee constituted with the involvement of Engineer/or his representative of the AICRP Centres of ICAR and Centres of CSIR, Officer of the State Department of Agriculture/ATMA at the District, Lead Bank Officer in the district, Representative of KVK from the District will jointly identify the beneficiaries under the scheme. In this case the Officer of the State Government will take lead and organize the meeting of the committee as Member Secretary. The technologies to be promoted will also be identified by this committee from within the suggestive list of technologies are given in **Annexure I & II.**
- (iv) The detailed proposals shall be forwarded by the State Government to the Department of Agriculture & Cooperation, Government of India, indicating the name of technologies/equipments to be promoted, its unit cost, number of units total cost of the units and the amount of subsidy.
- (v) The Government of India, with the assistance of a Technical Committee, shall decide the viability of the proposals and accordingly release the funds to the State Governments.
- (vi) Technical guidance will also be provided by the ICAR/CSIR/SAU centers.
- (vii) Government assistance (subsidy) @ 40% of the total cost of technology/project shall be provided to the individual farmers who are in a position to invest to the extent of 60% of the cost of project.
- (viii) The subsidy will be routed through the State Governments just like in other cases of distribution of agricultural machinery etc. to the farmers under

the Macro Management Scheme. Same principles and methodology as under Macro Management scheme will be followed by the State Governments.

- (ix) The State Government shall ensure that 16% beneficiaries under the scheme shall belong to SC category, 8% to ST category and 30% women as per Government of India guidelines.
- (x) At the end of every financial year, the State Government shall submit the utilization certificate in the format as given in <u>Annexure III.</u> The financial and physical progress shall also be submitted by the State Government in every quarter as per the format as given in <u>Annexure IV.</u> No fresh funds will be released unless the Utilization Certificate for the earlier releases is submitted by the State Government.

#### 2.3 Demonstration of Technologies.

Demonstration of post harvest management technologies/equipments is one of the important instruments for disseminating technology for fast popularization and adoption by the farmers. Under the scheme, the Demonstrations would be taken up through ICAR, CSIR, SAUs and State Departments of Agriculture.

#### 2.3.1 Objectives:

- (i) Testing of efficacy of post harvest technology units/equipments at the farmers' fields, under the actual field conditions.
- (ii) Performance and acceptability assessment of the post harvest technology units/equipments covered under the programme.
- (iii) Introduction of improved/newly developed equipment in Post Harvest Management system.

#### 2.3.2 Basic Considerations:

- (i) The demonstrations under the Scheme shall be organized under the ICAR, CSIR system, State Agricultural Universities (SAUs) and by State Governments. The Government of India shall provide 100% assistance for the procurement of technology/equipment and the contingency expenditure as per norms.
- (ii) The ICAR/CSIR Centres, SAUs and State Governments shall identify the technologies suitable for the catchments and shall forward detailed proposal indicating cost of the technology, number of units required, cost of each unit and total requirement of funds indicating the contingency expenditure separately based on the number of demonstrations to be conducted.
- (iii) During the demonstrations, acceptability of the post harvest technology units/equipments among the farmers shall be assessed.

- (iv) The demonstration site should be easily accessible to other farmers of the neighboring villages and extension workers coming from different locations.
- (v) As far as possible, the owner of the demonstration site may be a progressive farmer and preferably approachable by other farmers and extension workers.
- (vi) The expenditure to be incurred on the purchase of post harvest technology units/equipments by each State Government/Implementing Agency shall be within the overall sanctioned amount by the Government of India as per the Store Purchase Rules of the respective State Government/Implementing Agency.
- (vii) The contingency expenditure towards hiring of the prime mover, wherever necessary, transport cost of the equipment and attachments, cost of inputs, publicity, printing of the hand outs containing the technical information of the equipment selected for demonstration and other expenditure which is considered necessary for conduct of demonstrations may be included in the proposal submitted for consideration. Expenditure towards the recruitment of staff, TA/DA for the staff deputed for demonstrations shall not form the part of the contingency expenditure in any case.
- (viii) The contingency expenditures towards the conduct of demonstrations under the scheme, would be assessed by the respective State Government/Implementing Agency and proposal submitted to Government of India for approval in the beginning of each year. The expenditure on demonstration would be met out of the approved funds. At the same time, strict economy measures would need to be taken towards incurring contingency expenditure. However the total contingency expenditure per demonstration shall not exceed the following maximum limit:

a.	Power operated/self propelled equipment	:	Rs. 3000/-
b.	Bullock drawn equipment	:	Rs. 1500/-

- c. Manually operated equipment : Rs. 1000/-
- (ix) For hilly areas the cost per demonstration shall be 1.5 times of the above cost. The expenditure over and above the specified limits shall be borne by the respective implementing agencies.
- (x) The type of technology/equipment to be demonstrated shall be the priority requirement of the State/farmers as per crops grown/area and shall be decided by the implementing organization in consultation with the State Agricultural functionaries/State Agricultural Universities, CSIR/ICAR Centres.

- (xi) Fresh proposals for conduct of demonstrations and the equipment needed for the same would be invited/submitted in the beginning of each year. The fresh proposals may contain demand of contingency funds for the equipment already purchased out of earlier releases and also for fresh purchases and the contingency thereof. Each proposal shall be accompanied by the physical and financial progress of previous years. The States which have not been funded for the purpose earlier would be given priority over the others. The funds on account of contingency expenditures may be granted each year during the plan period.
- (xii) The proposals received from the implementing agencies shall be examined by a Technical Committee comprising officials from DAC, ICAR and CSIR. The Committee's recommendations for the equipment to be demonstrated based on availability of funds, progress of implementation of the scheme through previous releases and suitability of the equipment shall make the basis for release of funds.
- (xiii) Once the technology is established to be useful in the area of demonstration and has been demonstrated for at least 12 months, the same may be handed over to the private parties including SHG/UGs/Cooperative Societies of Farmers at 50% of the cost price. The cost price will be basically the capital cost i.e. cost of equipment/machinery plus any civil structure at the time of their installation.
- (xiv) The amount recovered from such handing over shall be indicated by the implementing agency which shall be adjusted with the fresh releases to the implementing agency or surrendered.

#### 2.3.3 Implementation:

- (i) All the demonstrations may be carried out under close supervision of the Implementing Agency who shall record observations of all important events so that the same could form a feed back for the State Government, Central Government and the research organizations.
- (ii) The concerned technical officer shall keep records of various expenses incurred for the demonstration.
- (iii) When the demonstrations are completed, analysis shall be made to bring out cost effectiveness and benefits of technology over the previous/traditional technology.
- (iv) No expenditure will be met from the scheme on purchase of tractor/power tiller, computer, video camera and any other such item and for any type of infrastructural development.
- (v) The scheme has been sanctioned for the Eleventh Plan Period during which Government of India would continue to release the funds. However, in the event of discontinuance of the Central Sector Scheme during the subsequent Plan Period and in case of the need of the State for conducting such demonstrations further, the expenditure will be met by the respective State Governments.

- (vi) State Governments/Other implementing agencies will ensure completion of the targeted number of demonstrations fixed for the year.
- (vii) The expenditures towards repair and maintenance of equipments/ machines under the scheme shall be met by the concerned State Government/Other Implementing Agency and/or from the contingency amount.
- (viii) Procurement of equipments/machines under the scheme will be made by the concerned State Government/Other Implementing Agency as per its prevailing Financial/Store Purchase Rules.
- (ix) The equipments/machines procured under the scheme will be a part of inventory of the State Government/Other Implementing Agency for one year of demonstration period and necessary store purchase procedures/rules shall be strictly followed in this regard.
- (x) The Annual Audited Statement of account together with the certificate of actual utilization of the grants received by the State Government/Other Implementing Agency shall be submitted to the Department of Agriculture & Cooperation, Government of India, within one month of the expiry of the financial year i.e. 30<sup>th</sup> April of the subsequent year.
- (xi) The State Government/Other implementing Agency shall ensure that 16% beneficiaries under the scheme belong to SC category, 8% to ST category and 30% women as per Government of India guidelines. The quarterly progress report shall be submitted by the State government/Other Implementing Agency in the format given in <u>Annexure V.</u>

#### 2.3.4 Supervision:

- (i) The State Department of Agriculture/ Other Implementing Agency concerned would ensure effective implementation and supervision of the Scheme by the officers specially designated for the purpose. The Officers from Farm Machinery Training and Testing Institute at Budni (M.P.), Hissar (Haryana), Garladinne (A.P.), Biswanath Chariali (Assam) and the officers from the Ministry of Agriculture shall be undertaking random visits to see the actual demonstration and assess the performance of the equipment demonstrated and their acceptability among the farmers.
- (ii) The success story of demonstrations may be published in popular journals/periodicals for the benefits of other farmers in the State and also for the farmers of the other States.

#### 2.4 Training of Farmers, Entrepreneurs and Scientists.

#### **Objectives:**

(i) To develop and improve upon the technical know-how of the users of post harvest technologies for its proper and effective utilization.

- (ii) To encourage manufacturers to take up the commercial production of technologies developed by the Research and Development organizations.
- (iii) To train scientists of AICRP, Krishi Vigyan Kendras (KVKs) of ICAR and Extension Centres of CSIR for propagation of technologies developed by other AICRP, KVKs of ICAR and Extension Centres of CSIR.

#### 2.4.1 Basic Considerations:

- (i) The financial assistance @ Rs. 2600/- per farmer per week shall be provided to the institutions identified for training of farmers which includes stipend of Rs. 200/- per farmer per week of training, to and fro travel expenses by ordinary mode of transport in ordinary class with a maximum of Rs. 350/- per farmer, Boarding and Lodging Charges @ Rs. 1050/- per farmer per week and Institutional charges (including stationary, training material, honorarium) @ Rs. 1000/- per farmer per week.
- (ii) Training on manufacturing technologies shall be conducted through ICAR/CSIR institutions. Financial assistance @ Rs. 3000/- per entrepreneur per week for each training programme will be provided to the institutions identified for conducting such training programmes which will include Boarding/Lodging and session tea charges @ Rs. 1500/- per entrepreneur per week and institutional charges (including stationary, training material, honorarium) @ Rs. 1500/- per week per entrepreneur.
- (iii) Training of scientists of AICRP, KVKs of ICAR and Extension Centres of CSIR for propagation of technologies developed by other AICRP, KVKs of ICAR and Extension Centres of CSIR shall be conducted by the concerned technology developing AICRP, KVKs of ICAR and Extension Centres of CSIR. Financial assistance @ Rs. 3000/- per scientist per week for each training programme will be provided to the centers conducting the training programmes which will include Boarding/Lodging and session tea charges @ Rs. 1500/- per trainee per week and institutional charges (including stationary, training material, honorarium) @ Rs. 1500/- per week per trainee.
- (iv) The institutions identified for training should have adequate infrastructure/machinery and equipments for organizing the training programmes.
- (v) The detailed proposal for the trainings shall be submitted by the implementing agencies to this Department through their controlling agencies indicating name of the course, duration of the course, number of courses proposed to be organized, number of trainees in each batch and the requirement of funds accordingly.
- (vi) The proposals received from the implementing agencies shall be examined by a Technical Committee comprising officials from DAC, ICAR and CSIR and accordingly the funds will be released to the implementing agencies.

- (vii) Once the institution is identified for the training, the training calendar for the year shall be prepared by the institution for wider circulation.
- (viii) Implementing agency shall ensure that 16% beneficiaries under the scheme belong to SC category, 8% to ST category and 30% women as per Government of India guidelines. The quarterly progress report shall be submitted by the implementing agency in the format given in **Annexure VI.**
- (ix) The Annual Audited Statement of account together with the certificate of actual utilization of the grants received by the implementing agency shall be submitted to the Department of Agriculture & Cooperation, Government of India, within one month of the expiry of the financial year i.e. 30<sup>th</sup> April of the subsequent year. No fresh funds will be released unless the Utilization Certificate for the earlier releases is submitted by the implementing agency.

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#### ANNEXURE-I

# Appropriate Technologies/Systems developed under the AICRP, ICAR on PHT Scheme to check the loss of food grains and post harvest production

SI. No.	Name of Equipment/Technology				
1.	Optimum Stage of harvesting for rice, sorghum, groundnut, pigeon pea etc. crops (JNKVV Jabalpur, PKV Akola, IIT Kharagpur, OUA&T Bhubaneswar and other centers)				
2.	Plant material based stored grain disinfectants (GBPUA&T Pantnagar)				
3	Low cost grain infestation detector (CIAE Bhopal)				
4	Evaporatively cooled storage structures for oranges and potato (PKV Akola)				
5	Temporary crop covering devices (PKV Akola)				
6	Groundnut pod grader (power operated) (TNAU Coimbatore)				
7	Rotary screen grain pre-cleaner (PAU Ludhiana)				
8	Single and double drum paddy grain pre-cleaner (PAU Ludhiana)				
9	Paddy winnower (TNAU Coimbatore)				
10	Mango grader (GBPUAT Pantnagar)				
11	Storage technology for pulses (JNKV Jabalpur)				
12	Rapid curing of betel leaf (OUA&T Bhubaneshwar)				
13	Trolley-cum-batch type drier (PAU Ludhiana)				
14	Paddy husk fired furnance (GBPUA&T Pantnagar)				
15	Solar heat treatment machine for seeds (RAU Udaipur)				
16	Osmo-vac drying of mushrooms (GBPUA&T Pantnagar)				
17	Batch type drier for arecanuts (UAS Bangalore)				
18	Cardamom drier (UAS Bangalore)				
19	Sun drying of chillies on different floors (CIAE Bhopal)				
20	Solar-cum-husk fired paddy drier (CRRI Cuttack)				
21	Solar cabinet drier (RAU Udaipur)				
22	Solar batch-in-bin drier (JNKVV Jabalpur)				
23	Process for erogt-bajra separation (RAU Udaipur)				
24	Solar drier-cum-green house (GAU Junagadh)				
25	Household paddy parboiling unit (TNAU, Coimbatore)				
26	Chittore stone bin for safe storage of food grains (RAU Udaipur)				
27	Low cost seed storage bins from used bitumen drums (CIAE Bhopal)				
28	G.I.sheet metal bins for storage of food grains (PAU Ludhiana, CIAE Bhopal)				
29	Use of biogas for stored grains insects disinfestations (PAU Ludhiana)				
30	Safe storage of soybean seeds (CIAE Bhopal)				
31	Use of Acorus calamus as grain protectant (JNKVV Jabalpur)				

32	Plywood bin (PAU Ludhiana)				
33	Natural air ventilated onion storage structure (CIAE Bhopal)				
34	Use of activated clay as grain protectant (JNKVV Jabalpur)				
35	Infrared seed treater (TNAU Coimbatore)				
36	Magnetic treater for seed (PKV Akola)				
37	Packaging of banana for enhanced shelf life (TNAU Coimbatore)				
38	Packaging of mango (GAU Jabalpur)				
39	Process for bottling of sugarcane juice (TNAU Coimbatore)				
40	Snowball tender coconut machine (CPCRI Kasargod)				
41	Small scale bailing gadget for straw (GAU Junagadh)				
42	Straw bailing system (CIAE Bhopal)				
43	Sunflower decortication (UAS Bangalore, CIAE Bhopal)				
44	Groundnut stripper (TNAU Coimbatore)				
45	Alkali treater for straw (GBPUA&T Pantnagar)				
46	Roller sugarcane crusher (TNAU Coimbatore)				
47	Coconut dehusker (TNAU Coimbatore)				
48	Cassava chipper (TNAU Coimbatore)				
49	Pealer for sorghum (TNAU Coimbatore)				
50	Power operated groundnut decorticator (TNAU Coimbatore)				
51	Paddy parboiling process (IIT Kharagpur)				
52	Farm level paddy parboiling tank (CRRI Cuttack)				
53	Briquetting of bio-mass and pyrolyser (JNKVV Jabalpur, PAU				
	Ludhiana)				
54	Briquetting of wir pith (TNAU Coimbatore)				
55	Turmeric boiler (TNAU Coimbatore)				
56	Oleoresin from ginger (AAU Jorhat)				
57	Production of ragi flour (UAS Bangalore)				
58	Puffing of coarse cereals (IIT Kharagpur)				
59	Roofing tiles from soybean straw and cement (JNKVV Jabalpur)				
60	Guava toffee (JNKVV Jabalpur)				
61	Tamaring kernal paste (UAS Bangalore)				
62	Infrared stabilization of rice bran (GBPUA&T Pantnagar)				
63	Board from leather dust and banana pseudo-stem (TNAU				
	Coimbatore)				
64	Post harvest management of turmeric (OUAT Bhubaneshwar)				
65	Vivek thresher cum pearlier				
66	Household insect trap				
67	Technology for extraction of kernel oil from apricot stones/seeds				
60					
68	Mechanical fruit washer				
69	Vegetable washer				
69 70	Vegetable washer Osmo dehydrated pineapple slices/rings and tibids				
69 70 71	Vegetable washerOsmo dehydrated pineapple slices/rings and tibidsPulper cum washer for coffee				
69 70	Vegetable washer Osmo dehydrated pineapple slices/rings and tibids				

74	Agriculture wastes fired dryer for red chillies					
75	Mini dal mill					
76	Double grading jaggery furnace for increased heat efficiency					
77	Bottling of Sugarcane juice					
78	Liquid Jaggery production process					
79	Electronic/digital thermometer to indicate the striking point					
	temperature					
80	Feed block making machine					
81	Maize dehusker/sheller					
82	Groundnut decorticator					
83	Garlic bulb breaker					
84	Process technology for garlic flakes and powder					
85	Cleaner cum grader for cumin					
86	Process for production of coconut chips					
87	Solar cum electrical dryer with biofuel as third source of energy					
88	Pepper thresher					
89	Shell fired Copra dryer					
90	On farm fruit grader					
91	Straw Reaper					
92	Straw Baler					
93	Straw Rake					

# **ANNEXURE-II**

CSIR Technology	for Post Harvest Technology & Management
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S.	IR Technology for Post Harvest Technology & Management Name of Equipment/technology
S. No.	Name of Equipment/technology
1	Manufacturing ropes, twines, yarn and fabrics from Bhendi and
	Tengamora Fibre in combination with cotton
2	Production of ropes, twines, coarse woven fabric, paper, linoleum
2	backings & grocery bags, organic compost from processing waste
	etc.from Banana Fibres
3	Medium Density Particle/Fibre Board from agro-industrial waste (rice
	husk, rice straw, jute sticks etc.)
4	Betel Nut Husk Fibre for making artificial cotton
5	Portland Cement from Paddy husk as a fuel
6	Zeolite from Paddy husk/Ash-synthetic detergent
7	A New Grain Storage Container for NE region
8	Power operated Paddy thresher
9	Power operated Paddy thresher-cum-winnower
10	Engine operated paddy thresher- cum-winnower
11	Multipurpose grain winnower
12	Power operated semi automatic pulse thresher-cum-winnower
13	Engine/power operated fully automatic pulse thresher-cum-
	winnower
14	Biomass operated multi purpose drier
15	Biomass operated spice drier (cardamom, chilly, ginger etc.)
16	Multi purpose Biomass Drier
17	Mini grain mill
18	Mini dhal milling system
19	Versatile dhal mill
20	Modern dhal mill
21	Parboiling plant (2 TMP/4 TPM)
22	Rice bran stabilizing system (thermal/acid)
23	Simple rice milling systems (double pass single huller, single pass
	double huller, centrifugal sheller huller)
24	Integrated rubber roll sheller huller rice mill
25	Dry maize milling plant
26	Oil Expeller of 1 Ton Per Day Capacity for extraction of pungent
	mustard oil
27	Oil Expeller of 10 Ton Per Day Capacity for extraction of pungent
20	mustard oil
28	Sugarcane Harvester with capacity 0.50 hectare/hr.
29	Sugarcane Cutter Planter
30	Cashewnut Decorticator to shell 20-25 kg of raw nuts per worker in 8 hrs shift
31	
32	Fluidized Bed Dryer for oilseeds of required capacities Tea Leaf Plucking Machine with harvesting capacity of 1 hectare/day
33	Dry flower technology
55	Dry nower technology

#### **ANNEXURE III**

#### FORM GER 19-A

#### (See Government of India's Decision (i) below rule 150)

SI.	Letter No. &	Amount	Certified that out of Rsof
No	Date		grants-in-aid sanctioned during
	Dute		the year in favour of under this Ministry/Department's letter No. given in the margin and Rs on account of unspent balance of the previous year, a sum of Rs has been utilized for the purpose of for which it was sanctioned and that the balance of Rs remaining unutilized at the end of the year has been surrendered to Government (Vide No dated/will be adjusted towards the grant-in-aid payable during the next year

### FORM OF UTILIZATION CERTIFICATE

2. Certified that I have satisfied 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.

- 1.
- 2.
- 3.
- 5.
- 4.
- 5.

Signature:	
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Name:	
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Designation: -----

#### QUARTERLY PROGRESS REPORT FOR ESTABLISHMENT OF LOW COST POST HARVEST TECHNOLOGY (PHT) UNITS/SUPPLY OF PHT EQUIPMENTS WITH GOVERNMENT ASSISTANCE.

NAME OF STATE : QUARTER ENDING :

#### **A: PHYSICAL PROGRESS:**

S.	Items as	Tar.	Ach.	ch. Farmers benefited (no.)					no.)	
No.	approved for supply			Small	Margi nal	SC	ST	Wom en	Others	Total
1	2	3	4	5	6	7	8	9	10	11
1.										
2.										
3.										
4.										
5.										
6.										
7.										
8.										
9.										
10.										

# B. FINANCIAL PROGRESS: (Rs. in lakh)

S.No.	Unspent balance as on 1.4	Allocation during the year	Cumulative Expenditure till month ending	Unspent balance as on 1 <sup>st</sup> of next month			
1.	2.	3.	4.	5.			

#### PHYSICAL AND FINANCIAL PROGRESS OF DEMONSTRATION COMPONENT UNDER CENTRAL SECTOR SCHEME POST HARVEST TECHNOLOGY AND MANAGEMENT

# STATE : \_\_\_\_\_ CUMULATIVE TILL MONTH ENDING:\_\_\_\_\_

#### A. PHYSICAL:

Name of	No. of	Area	Hours	Farmers	<pre>s benefited(Nos.)</pre>			
Equipment	Demo. Conducted	covered (Ha.)	of demo.	Women	SC	ST	Total	
1.	2.	3.	4.	5.	6.	7.	8.	

#### **B. FINANCIAL : (RS. IN LAKH)**

S.No.	Unspent balance as on 1.4	Allocation during the year	Cumulative Expenditure till month ending	Unspent balance as on 1 <sup>st</sup> of next month
1.	2.	3.	4.	5.

#### **ANNEXURE VI**

PHYSICAL AND FINANCIAL PROGRESS OF TRAINING OF FARMERS, ENTREPRENEURS AND SCIENTISTS UNDER CENTRAL SECTOR SCHEME POST HARVEST TECHNOLOGY AND MANAGEMENT'

STATE /IMPLEMENTING AGENCY: \_\_\_\_\_\_ CUMULATIVE TILL MONTH ENDING:\_\_\_\_\_\_

### A. PHYSICAL PROGRESS :

Name of Training Institution	Name of the	Training targets	No. of trainees trained		d	
	Training Course and No. of Training Courses		Women	SC	ST	Total
1.	2.	3.	4.	5.	6.	7.

# **B. FINANCIAL PROGRESS: (RS. IN LAKH)**

S.No.	Unspent balance as on 1.4	Allocation during the year	Cumulative Expenditure till month ending	Unspent balance as on 1 <sup>st</sup> of next month
1.	2.	3.	4.	5.

MEMORANDUM OF UNDERSTANDING (MOU) UNDER CENTRAL SECTOR SCHEME "POST HARVEST TECHNOLOGY & MANAGEMENT" AMONG THE STATE GOVERNMENT, ICAR/CSIR AND SHGs/UGS OF FARMERS/ COOPERATIVE SOCIETIES OF FARMERS/NGOS ETC.

#### ACTIVITY:

#### "ESTABLISHMENT OF UNITS FOR PRIMARY PROCESSING TECHNOLOGY, VALUE ADDITION, LOW COST SCIENTIFIC STORAGE, PACKAGING UNITS AND BI-PRODUCT MANAGEMENT IN THE PRODUCTION CATCHMENTS UNDER TRIPARTITE AGREEMENT"

- The State Government of \_\_\_\_\_\_ has identified Shri/M/s/SHG/NGO \_\_\_\_\_\_ as a prospective beneficiary under the Central Sector Scheme "Post Harvest Technology & Management".
- The ICAR/CSIR has agreed to provide technical know how for the establishment of \_\_\_\_\_\_ (name of unit/technology) and to prepare a Project Report (PR) for the identified beneficiary.
- The identified beneficiary has agreed to establish the unit in his production catchments at \_\_\_\_\_\_ (name of site) and contribute 60% of the cost of the unit from his resources.
- The proposed technology will be supplied by \_\_\_\_\_ (source of supply)
- Ministry of Agriculture, Department of Agriculture & Cooperation will provide funds to the tune of 40% of the Project cost, limited to Rs.4.00 lakh through the Technical Institution concerned.
- The identified technology would be established at the site by \_\_\_\_\_ (Date of establishment).
- This agreement is based on the Project Proposal.
- Department of Agriculture & Cooperation will monitor the implementation of the scheme
- The technologies will be demonstrated and established under the supervision of CSIR/ICAR
- The units so established will operate for one year at the site (catchments) under the supervision of CSIR/ICAR and then transferred to the beneficiary fully for its independent operation. The CSIR/ICAR will withdraw at this stage with adjustment of cost of the project.