

**F.No.8-1/2004-My.(I&P)**  
GOVERNMENT OF INDIA  
Ministry of Agriculture  
Department of Agriculture & Cooperation  
(M&T Division)

Krishi Bhawan, New Delhi  
Dated the 14<sup>th</sup> September, 2010.

To

Principal Secretary / Secretary (Agriculture)  
All States & UTs.

**Subject: Ensuring supply of quality agricultural machinery and equipment under Governmental programmes.**

Sir,

Reference is invited to this Department's letter No.12-10/2005-M&T (I&P) dated 8<sup>th</sup> April, 2009 on the above subject. Based on the feedback from the State Governments and after taking into consideration the recommendations of the Technical Committee constituted to examine this matter, the department has brought out revised guidelines for ensuring supply of quality agricultural machinery and equipments under governmental programmes and schemes.

A copy of revised guidelines is enclosed herewith for information and necessary action.

  
14/09/10

(S.K.G. Rahate)

Joint Secretary to the Government of India.

**Encl: As above.**

**Copy for information & necessary action to:-**

1. Vice Chancellor / Head of the Deptt. / Director / Deans of all twenty one institutions as per Annexure – II.
2. Director of Agriculture / Director (Agriculture Engineering) / Chief Engineers of all States & UTs.
3. Director, all Farm Machinery Training and Testing Institutes.

  
14/09/10

(S.K.G. Rahate)

Joint Secretary to the Government of India.

फा.सं-8-1/2004-मशीनरी (आई एण्ड पी)  
भारत सरकार  
कृषि मंत्रालय  
कृषि एवं सहकारिता विभाग

कृषि भवन, नई दिल्ली  
दिनांक 14 सितम्बर, 2010


सेवा में,  
प्रधान सचिव/सचिव (कृषि)  
सभी राज्य एवं के.शा.प्रदेश

**विषय:** राजकीय कार्यक्रमों के तहत गुणवत्ताप्रद कृषि मशीनरी एवं उपकरणों की आपूर्ति की सुनिश्चितता ।

महोदय,

उपरोक्त विषय पर इस विभाग के पत्र सं.-12-10/2005-एम एण्ड टी (आई एण्ड पी) दिनांक 8 अप्रैल, 2009 का संदर्भ ग्रहण करें । राज्य सरकारों से प्राप्त फीडबैक के आधार पर और इस मामले की जांच के लिए गठित तकनीकी समिति की सिफारिशों को ध्यान में रखते हुए, विभाग ने राजकीय कार्यक्रमों एवं स्कीमों के तहत गुणवत्ताप्रद कृषि मशीनरी एवं उपकरणों की आपूर्ति की सुनिश्चितता के लिए संशोधित दिशानिर्देश तैयार किये हैं ।

संशोधित दिशानिर्देशों की एक प्रति सूचनार्थ एवं आवश्यक कार्यवाही हेतु सलग्न कर दी गई है ।



( एस.के.जी रहाटे )

संयुक्त सचिव, भारत सरकार

संलग्नक: उपर्युक्त

सूचनार्थ एवं आवश्यक कार्यवाही हेतु प्रति प्रेषित:

1. कुलपति/विभागाध्यक्ष/निदेशक/अनुबंध II के अनुसार सभी इक्कीस संस्थानों के डीन को
2. कृषि निदेशक/निदेशक (कृषि अभियांत्रिकी)/सभी राज्यों/के.शा.प्रदेशों के मुख्य अभियन्ता
3. निदेशक, सभी कृषि मशीनरी प्रशिक्षण एवं परीक्षण संस्थान ।



**Guidelines for Ensuring Supply of Quality Agricultural Machinery and Equipment under  
Governmental Programmes and Schemes  
(Revised: September 2010)**

- (i) The State Governments shall ensure that the agricultural machinery and equipment including equipment with new technology as per **Schedule – A of Annexure-I** are tested and certified by the Farm Machinery Training & Testing Institutes (FMT&TIs) **only** before they are supplied under any government assisted programmes. Tractors shall be tested by the CRFMT&TI, Budni (MP), Combine harvesters by the NRFMT&TI, Hissar (Haryana) and Power tillers by the SRFMT&TI, Garladinne (AP). Remaining agricultural machinery and equipment shall be tested by the NRFMT&TI, SRFMT&TI and NERFMT&TI, Biswanath Chariali (Assam).
- (ii) The State Governments shall also ensure that agricultural machinery and equipment including equipments with new technology as per **Schedule – B of Annexure – I** are tested and certified either by the **FMT&TIs** or by DAC approved twenty one (21) Agricultural Institutions as per the list enclosed as **Annexure – II** before they are supplied under any government assisted programmes.
- (iii) The State Governments should make their own arrangement for ensuring the quality of the agricultural machinery and equipment outside the list as per Annexure-I before they are supplied under Government assisted programmes. The State Governments may get the equipment tested and certified, if considered necessary, through institutions such as any Department of State Agricultural University (SAU), Engineering College, ICAR institutions, Krishi Vigyan Kendra (KVK) or any other research institute designated by the State Governments. The test reports released by these designated institutions may be relied upon by all the State Governments. The suggestive list of required infrastructure for testing of agricultural machinery and equipment is enclosed at **Annexure -III** for guidance.
- (iv) The institutions designated as per the list enclosed as Annexure – II or the Institutions designated by the State Governments shall carry out the testing as per relevant Indian Standards. If, the Indian Standard is not available, the testing may be carried out as per any other relevant International standard. In case of non-availability of Indian/International Standard, the Institutions may devise appropriate procedure in consultation with the manufacturer. They may also seek guidance from FMT&TIs.
- (v) Any other newly developed or imported machinery which is not covered under the list enclosed as Annexure – I but needs performance evaluation before introduction into the Indian agriculture sector shall be tested by either FMT&TIs or approved Institutions listed as per Annexure – II or by Institutions identified by the State Govts. before they are supplied under government assisted programmes.
- (vi) The State Governments should have a system of random pre and/or post dispatch checks of agricultural equipment being promoted through Governmental Programmes.
- (vii) The equipment such as Plant Protection equipment, irrigation equipment and diesel engines etc. are currently covered under BIS certification. Therefore, such equipments having ISI mark may be considered for promotion under Governmental programmes and schemes.
- (viii) The Power operated thresher, power operated sugarcane crusher and power operated chaff cutter are covered under the purview of Dangerous Machines (Regulation) Act 1983. It may therefore, be ensured that these equipment conform to necessary requirements of Dangerous Machines (Regulation) Rules 2007 published vide Gazette Notification No. G.S.R. 506 (E) dated 24<sup>th</sup> July 2007 or as modified from time to time.

\*\*\*\*\*



Annexure-I

SCHEDULE - A

**LIST OF AGRICULTURAL MACHINERY AND EQUIPMENTS TO BE TESTED ONLY AT FARM MACHINERY TRAINING AND TESTING INSTITUTES (FMT&TIs) OF THE DEPARTMENT OF AGRICULTURE AND COOPERATION, MINISTRY OF AGRICULTURE, GOVERNMENT OF INDIA**

S.N.	Name of Equipment/Machine
<b>A</b>	<b>Land Development, tillage and Seedbed preparation Equipments</b>
1	Tractor
2	Power Tiller
3	Cultipacker (Tractor Mounted)
4	Pulverizing Roller (Tractor drawn)
5	Laser land leveler
<b>B</b>	<b>Sowing &amp; Planting Equipment</b>
6	Self-propelled Paddy Transplanter/Mat type power operated paddy transplanter
7	Multi-crop Planter (Tractor Driven)
8	Vegetable Transplanter (Tractor drawn)
9	Tractor Drawn Pneumatic Planter
10	Roto Till drill/Strip till drill/Happy combo seeder
<b>C</b>	<b>Intercultivation Equipments</b>
11	Power Weeder more than 3.5KW
12	Light Weight Power Tiller
<b>D</b>	<b>Plant Protection Equipment</b>
13	Tractor mounted sprayer
14	Self propelled high clearance sprayer
15	Acroblast sprayer/Orchard Sprayer
<b>E</b>	<b>Harvesting &amp; Threshing Equipments</b>
16	Combine Harvester (Self Propelled/Tractor Powered)
17	Self propelled vertical conveyor reaper/binder
18	Tractor/power tiller drawn vertical conveyor reaper
19	Self propelled forage harvester
20	Hadamba/syndicator thresher
<b>F</b>	<b>Equipments for Residue Management</b>
21	Tractor Driven Straw Shredder
22	Tractor Driven Straw Baler
23	Feed- Block making Machine
24	Tractor Driven Forage Harvester
<b>G</b>	<b>Post Harvest &amp; Agro Processing Equipments</b>
25	Rubber roll rice sheller

Annexure-I  
(CONTINUED)

SCHEDULE - B

**LIST OF AGRICULTURAL MACHINERY AND EQUIPMENTS TO BE TESTED  
EITHER AT FMTTIs OR APPROVED AGRICULTURAL INSTITUTIONS  
LISTED AS PER ANNEXURE -II**

<b>S.N.</b>	<b>Name of Equipment/Machine</b>
<b>A</b>	<b>Land Development, tillage and Seedbed preparation Equipments</b>
1	Hydraulically Reversible MB Plough
2	Combined Tillage Tool (Tractor drawn)/Integrated tool bar
3	Rotavator
4	Cultivator
5	Disc / M.B. Plough
6	All types of Harrows
<b>B</b>	<b>Sowing &amp; Planting Equipment</b>
7	Tractor Driven Potato Planter
8	Tractor Driven Ridger Seeder
9	Tractor Driven Groundnut Planter
10	Raised-bed Planter
11	Tractor Drawn Sugarcane Cutter Planter
<b>C</b>	<b>Intercultivation Equipments</b>
12	Power Weeder up to 3.5KW
<b>D</b>	<b>Plant Protection Equipment</b>
13	Self propelled light weight boom sprayer
<b>E</b>	<b>Harvesting &amp; Threshing Equipments</b>
14	Tractor mounted potato digger elevator
15	Tractor mounted groundnut digger shaker
16	Power Sunflower thresher
17	Powered maize sheller
18	Multicrop thresher
19	Axial flow paddy thresher
20	Powered Groundnut thresher/decorticator
21	Power Maize dehusker cum sheller
<b>F</b>	<b>Equipments for Residue Management</b>
22	Flail type straw chopper cum spreader
<b>G</b>	<b>Post Harvest &amp; Agro Processing Equipments</b>
23	Semi-automatic mini dal mill



## ANNEXURE – II

### List of Institutions approved by the Dept. of Agriculture and Cooperation, Min. of Agriculture, Govt. of India for testing and certifying Agricultural Machinery and Equipments

1. Acharya N G Ranga Agricultural University, Agricultural<sup>®</sup> Research Institute, Rajendra Nagar, Hyderabad, **Andhra Pradesh**
2. Faculty of Agricultural Engineering, Rajendra Agricultural University, Pusa, **Bihar**
3. College of Agricultural Engineering and Technology, Gujarat Agricultural University, Junagarh, **Gujarat**
4. SK University of Agricultural Sciences and Technology of Kashmir, Directorate of Research, Srinagar, **Jammu & Kashmir**
5. College of Agricultural Engineering and Technology, CCSHAU, Hisar, Haryana
6. Birsa Agricultural University, Kanke, Ranchi, **Jharkhand**
7. University of Agricultural Sciences, Bangalore, **Karnataka**
8. College of Agricultural Engineering, UAS, Raichur, **Karnataka**
9. College of Agricultural Engineering, Kerala Agricultural Engineering, Tavanur, Kerala
10. Central Institute of Agricultural Engineering, Bhopal, **Madhya Pradesh**
11. College of Agricultural Engineering and Technology, BSKVV, Dapoli, **Maharashtra**
12. College of Agricultural Engineering and Technology, Maratwada Agricultural University, Parbhani, **Maharashtra**
13. Division of Agricultural Engineering, Indian Agricultural Research Institute, **New Delhi**
14. College of agricultural Engineering and Technology, Orissa University of Agriculture and Technology, Bhubaneswar, **Orissa.**
15. College of Agricultural Engineering and Technology, Punjab Agricultural University, Ludhiana, **Punjab**
16. College of Technology and Engineering, Maharana Pratap University of Agriculture and Technology, Udaipur, **Rajasthan**
17. College of Agricultural Engineering and Post Harshrest Technology, Ranipool, Gangtok, **Sikkim**
18. Tamil Nadu Agricultural University, Coimbatore, **Tamil Nadu.**
19. Sam Higginbottom Institute of Agriculture, Technology and Sciences, Allahabad , **Uttar Pradesh**
20. College of Technology, Gobind Ballabh Pant University of Agriculture and Technology, Pantnagar, **Uttaranchal**
21. Department of Agriculture and Food Engineering, Indian Institute of Technology, Kharagpur, **West Bengal**

\*\*\*\*\*

### ANNEXURE III

#### SUGGESTIVE LIST OF MANPOWER AND INFRASTRUCTURE REQUIRED FOR TESTING CENTRE FOR TESTING OF HAND TOOLS, MANUAL / BULLOCK DRAWN EQUIPMENTS AND POWER DRIVEN MACHINES.

##### 1. MANPOWER

S.No.	Name of Post	No. of posts	Qualification
1.	Test Engineer (Equivalent to Asstt. Professor in SAUs.)	One	Graduation in Agricultural Engineering with experience in the area of testing and evaluation of machines. Preferably Post graduation in Farm Machinery and Power.
2.	Senior Technical Assistant (Equivalent to Senior Research Assistant in SAUs)	One	Graduation in Agricultural Engineering
3.	Test Operator	One	ITI in Diesel Mech./Motor Mech./Farm Mech. or its equivalent with experience in handling of agricultural machines.
4.	Skilled Labour	One	Class 10 <sup>th</sup> Pass with Tractor Driving experience.

##### 2. LAND AND BUILDINGS

S.No.	Particulars of requirements
1.	One Office building for Testing Engineer, Senior Technical Assistant with furniture, computer and internet facility.
2.	One closed shed of Size 30 X 50 or 25 X 40 ft with sitting arrangement for Test Operator /Skilled Labour.
3.	5 – 10 Acres of Irrigated Agriculture/cultivated land for field trials.
4.	Small workshop for repair and maintenance of agricultural machines. Having workshop machinery such as Lathe, drill machine, welding machine, power hacksaw etc.

##### 3. PRIME MOVERS

S.No.	Particulars	Qty.
1.	Tractor – 35-40 PTO HP	1 No.
	- More than 50 HP	1 No.
2.	Power Tiller (10 – 15 HP)	1 No.
3.	Electric Motors (7.5 HP)	1 No.



#### 4. INSTRUMENTATION

S.No.		Qty.
1	<b>Dynamometer (25 kw) for testing engines of self propelled machines.</b>	1 No.
2.	<b>Set of meteorological instruments such as :</b>	
	a) Vernier Caliper	2 Nos.
	b) Micrometer (different range)	2 Sets
	c) Bore gauge (different range)	2 Sets
	d) Spirit level	2 Nos.
	e) Abney level	2 Nos.
3.	<b>Measuring instruments such as :</b>	
	a) Stop watch	2 Nos.
	b) Thermometer	2 Nos.
	c) Barometer	2 Nos.
	d) Hygrometer	2 Nos.
	e) Tachometer (contact and non-contact)	2 Nos.
4.	<b>Equipments for material testing such as :</b>	
	a) Hardness testing machine (Brinell and Rockwell)	1 No.
	b) Hardness testing machine (Non conducting metals)	1 No.
5.	<b>Equipments for mass measurement :</b>	
	a) Digital electronic balance (1 Kg)	1 No.
	b) Platform type balance (200 Kg)	1 No.
	c) Spring balance (0-10 Kg , 0.20 Kg and 0.50 Kg.)	1 No. each
6.	<b>Moisture Measuring Instruments :</b>	
	a) Hot air oven	1 No.
	b) Speedy soil moisture meter	2 Nos.
	c) Grain moisture meter (0-50%)	2 Nos.
7.	<b>Equipments for Pull Measurement</b>	
	a) Dynamometer – spring type (0-1000 Kg)	1 No.
	b) Digital load cell with indicator (2 Ton)	1 No.
8.	<b>Volume fuel consumption measurement</b>	
	a) <b>Measuring Jar Set</b>	1 Set
9.	<b>Soil testing equipments</b>	
	a) Bulk density apparatus	2 Nos.
	b) Speedy soil moisture meter	2 Nos.
	c) Cone Penetrometer	2 Nos.
	d) ISI Soil test sieves	1 Set
10.	<b>Workshop and Service tools</b>	
	a) Platform type Jack (500 Kg)	1 No.
	b) Flat bed trolley (1000 Kg)	1 No.
	c) Air Compressor	1 No.
	d) Tool Kits (spanners, special repair tools, grease guns, torque wrench etc.)	2 Nos.