

**Annex AGRI - 2
Enhanced Domestic Food Production**

**Sub sector: VEGETABLE AND
FRUIT PRODUCTION And extension Activity: Provision of seeds seedling fertilizer**

Sector: AGRICULTURE

Priority within the sector: HIGH

A - CROP AND VEGETABLE SEED.

| Code | Item Description and its complementary items | Intended Use | Qty in unit | Allocation Criteria | Time frame | |
|-------------|--|--|-------------|-------------------------------|-------------------|-----------------------|
| | | | | | Field Application | Optimal Delivery Time |
| 05-02-00001 | Sunflower seed Hybrid variety . | Production of needed seed for cooking oil (sunflowers growers in the Governorates) | 500mt | Area under sunflower | SPRING | As soon as possible |
| 05-02-00002 | Cucumber Hybrid - F1 | Cucumber production, both in opened and covered fields (vegetable producers in the Governorates) | 50mt | Size of area under cucumbers. | WINTER & SUMMER | As soon as possible |
| 05-02-00003 | Tomato seed | Tomato production, both in open and covered fields (vegetable producers in the Governorates) | 40mt | Size of area under Tomato | WINTER & SUMMER | As soon as possible |
| 05-02-00004 | Squash seed Hybrid - F1 | Squash production in both open and covered fields (vegetable producers in the Governorates) | 10mt | Area under the squash | WINTER & SUMMER | As soon as possible |
| 05-02-00005 | Pepper seed | Pepper production in both open and covered fields (vegetable producers in the Governorates) | 8mt | Area under the pepper | WINTER | As soon as possible |
| 05-02-00006 | Onion seed | Onion production in open field (onion producers in the Governorates) | 25mt | Area under the onion | SPRING | As soon as possible |
| 05-02-00007 | Cowpeas | Cowpeas production in open field (vegetable producers in the Governorate) | 150mt | Area under the Cowpeas | SUMMER | As soon as possible |
| 05-02-00008 | Bean | Bean production in open field (vegetable producers in the Governorate) | 150mt | Area under the Bean | SPRING SUMMER | As soon as possible |
| 05-02-00009 | Eggplant | EggplantBrodbean(vegetable producers in the Governorate) | 10mt | Area under the Eggplant | SUMMER | As soon as possible |
| 05-02-00010 | Brodbean | Brodbean production in open field (vegetable producers in the Governorate) | 50mt | Area under the Brodbean | WINTER | As soon as possible |
| 05-02-00011 | Water Melon | Water melon production in the open field (water melon producers in the Governorates) | 30mt | Area under the water melon | SUMMER | As soon as possible |
| 05-02-00012 | Different Hybrid Seed for green Houses | covered vegetable field and green houses (vegetable producers in the Governorates) | 150kg | Area under the crop | WINTER | As soon as possible |
| 05-02-00013 | Rape | Production of needed seed for cooking oil (sunflowers growers in the Governorates) | 200mt | Area under the crop | WINTER | As soon as possible |

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| 05-02-00014 | Safflower | Production of needed seed for cooking oil (sunflowers growers in the Governorates) | 200mt | Area under the crop | WINTER | As soon as possible |
| 05-02-00015 | A) Potato seed (Super elite and elite) B) Sourghun-sudan grass seed | To be distributed to potato breeders for production of class A and B seed To be used for forge production | 5000MT 200 MT | To be distributed to potato breeders in the center and south according to farm size. To be distributed to dairy station and animal breeders. | ALL YEAR | As soon as possible |

B – FRUIT SEED AND SEEDLINGS:

| Code | Item Description and its complementary items (if applicable) | Intended Use | Qty in unit | Allocation Criteria | Time frame | |
|-------------|--|--|------------------------------------|--|--------------------|-----------------------|
| | | | | | Field application | Optimal Delivery Time |
| 05-02-00016 | Malus Communis Seed | Stock production for production of seedling to be distributed to the farmers (orchards owners in the Governorates growing the crop) | 10kg | Seed will be multiplied in specialized nurseries, the seedling will be distributed to farmers | DECEMBER - JANUARY | As soon as possible |
| 05-02-00017 | Pyrus Communis Seed | Stock production for production of seedling to be distributed to the farmers (orchards owners in the Governorates growing the crop) | 10kg | Seed will be multiplied in specialized nurseries, the seedling will be distributed to farmers | DECEMBER - JANUARY | As soon as possible |
| 05-02-00018 | Prunus Cerasifera Seed | following seeding, production of stocks in specialized nurseries then seedling distribution to the farmers (orchards owners in the Governorates favorable for this type) | 50kg | Seedling will be distributed to farmer on request, size of planted area under the fruit. | DECEMBER - JANUARY | As soon as possible |
| 05-02-00019 | Mauls Communes Seedling | Stock production for production of seedling to be distributed to the farmers (orchards owners in the Governorates growing the fruit) | 75000seedling | Seedling will be distributed to farmer on request area. | DECEMBER - JANUARY | As soon as possible |
| 05-02-00020 | Pyres communes seedling | Stock production for production of seedling to be distributed to the farmers (orchards owners in the Governorates favorable for this type) | 75000seedling | Seedling will be distributed to farmer on request area. | DECEMBER - JANUARY | As soon as possible |
| 05-02-00021 | Prunus Cerasifera Seeding | Stock production for production of seedling to be distributed to the farmers (orchards owners in the Governorates favorable for this type) | 50000seedling | Seedling will be distributed to farmer on request area/ and size of area under the crop. | DECEMBER – JANUARY | As soon as possible |
| 05-02-00022 | Olive rooted-stem cutting | To install olive orchid project and serving olive producers | 5000000 | Routed stem will be distributed to farmer on request area and size of area under the crop | All year round | As soon as possible |
| 05-02-00023 | Routing hormones powder A) IBA B) Serdex No. 3 | To be used by farmer and growers of orchids | 10X 1Kg 20X0.5Kg 200 X 100gm | The hormone will be distributed by the state company of orchids to the growers in the governorates | All year round | As soon as possible |
| 05-02-00024 | A)Pruning saw B) secateurs | To be used by the state board of orchids and growers in the 15 governorates in pruning activities | 500 10000 | The saws will be distributed to the company orchids and growers in the 15 governorates | All year round | As soon as possible |
| 05-02-00025 | Mulching polyathelene | To be used by the state board of orchids and growers in the nurseries | 50 MT | It will be distributed to the company and the growers in the 15 governorates | All year round | As soon as possible |
| 05-02-00026 | Black plastic sac 30 X 30 CM 15 X 30 CM seedling tray | = | 10 MT 200 MT 500000 Pcs | = | = | As soon as possible |
| 05-02-00027 | Netting shade Sheding 50% Sheding 75% | = | 50000 M2 50000 M2 | = | = | As soon as possible |

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| 05-02-00028 | Chessel 65 Cm 70 Cm | To be used in land preparation in the state company of orchids and growers | 50 50 | = | = | As soon as possible |
| 05-02-00029 | Green houses structure 500 M2 with accessorie 180 M2 with accessories (galvanised tubes) | To be used by farmers in winter protected vegetable production and also for orchid nurseries | 200 houses 200 houses (approx. 500MT of tubes) | Horticulture and forestry company , potato seed producers , vegetable growers in the 15 governorates | = | As soon as possible |

C - FERTILIZERS

| Code | Item Description and its complementary items (if applicable) | Intended Use | Qty in unit | Allocation Criteria | Time frame | |
|-------------|--|--|-------------|--|-------------------|-----------------------|
| | | | | | Field Application | Optimal Delivery Time |
| 05-02-00030 | Di ammonium phosphate | Will be spread in different fields crops (farmers) | 40000mt | State of soil fertility/size of cultivated area. | ALL YEAR ROUND | As soon as possible |
| 05-02-00031 | Potassium sulphate | Will be spread in vegetable fields both opened and covered (farmers) | 5000mt | State of soil fertility/size of cultivated area | ALL YEAR ROUND | As soon as possible |
| 05-02-00032 | Magnesium Sulphate | Will be used in vegetable fields (farmers) | 100mt | State of soil fertility/size of cultivated area | ALL YEAR ROUND | As soon as possible |
| 50-02-00033 | Ferrous Sulfate FeSo4 (Min 19-20 %) | Will be spread in vegetable fields both opened and covered (farmers) | 20mt | State of soil fertility/size of cultivated area | ALL YEAR ROUND | As soon as possible |
| 05-02-00034 | Zinc Sulfate ZnSO4 (35%) | Will be spread in vegetable fields both opened and covered (farmers) | 20mt | State of soil fertility/size of cultivated area | All year round | As soon as possible |
| 05-02-00035 | Micro Neturen fouler fertiliser | Will be spread in vegetable fields both opened and covered (farmers) | 50mt | State of soil fertility/size of cultivated area | All year round | As soon as possible |
| 05-02-00036 | Cupper sulphate CuSO4H2o (35 % Cu) | Will be spread in vegetable fields both opened and covered (farmers) | 10mt | State of soil fertility/size of cultivated area | All year round | As soon as possible |
| 05-02-00037 | Manganese sulphate MnSO4 3H2O (28 % Mn) | Will be spread in vegetable fields both opened and covered (farmers) | 25mt | State of soil fertility/size of cultivated area | All year round | As soon as possible |
| 05-02-00038 | (TSP) Citrate and water solubility 46 % P2O5 .P2O5 soluble in water not less than 30 % Humidity 1.7 Max. | Will be spread in vegetable fields both opened and covered (farmers) | 10000 mt | State of soil fertility/size of cultivated area | All year round | As soon as possible |

D - The installation of new banana nursery

| Code | Item Description and its complementary items (if applicable) | Intended Use | Qty in unit | Allocation Criteria | Time frame | |
|-------------|---|--------------|--|---|--|-----------------------|
| | | | | | Field Application | Optimal Delivery Time |
| 05-02-00039 | Complete green house | For (5) ha | To install pilot project for banana plantation (nursery) | Articulator and forestry company and banana plantation owners | The farm will be established in the central part of the country to serve banana producer | As soon as possible |
| 05-02-00040 | Drip irrigation unit | For (5) ha | To install pilot project for banana plantation (nursery) | Articulator and forestry company and banana plantation owners | The farm will be established in the central part of the country to serve banana producer | As soon as possible |

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|-------------|--------------------------------|--------------|--|---|--|---------------------|
| 05-02-00041 | Heating and cooling system | For (5) ha | To install pilot project for banana plantation (nursery) | Articulator and forestry company and banana plantation owners | The farm will be established in the central part of the country to serve banana producer | As soon as possible |
| 05-02-00042 | Fibre glass for green house | For (5) ha | To install pilot project for banana plantation (nursery) | Articulator and forestry company and banana plantation owners | The farm will be established in the central part of the country to serve banana producer | As soon as possible |
| 05-02-00043 | Shading net | For (5) ha | To install pilot project for banana plantation (nursery) | Articulator and forestry company and banana plantation owners | The farm will be established in the central part of the country to serve banana producer | As soon as possible |
| 05-02-00044 | Tractor 33 HP with accessories | 2 | To install pilot project for banana plantation (nursery) | Articulator and forestry company and banana plantation owners | The farm will be established in the central part of the country to serve banana producer | As soon as possible |
| 05-02-00045 | 80 KVA generators | 1 | To install pilot project for banana plantation (nursery) | Articulator and forestry company and banana plantation owners | The farm will be established in the central part of the country to serve banana producer | As soon as possible |
| 05-02-00046 | Banana seedling | 12000 | To install pilot project for banana plantation (nursery) | Articulator and forestry company and banana plantation owners | The farm will be established in the central part of the country to serve banana producer | As soon as possible |

E - 1 : Rehabilitation of the extension centers .

| Code | Item Description and its complementary items (if applicable) | Intended Use | Qty in unit | Allocation Criteria | Time frame | |
|-------------|--|--------------|-------------|---|-------------------|-----------------------|
| | | | | | Field Application | Optimal Delivery Time |
| 05-02-00047 | Digital Betacam SP camera complete (DXC-D30P) with portable video cassette recorder (PVV-3P). Includes : 1.5" viewfinder ; tripod adapter; rain cover; extender board and operation / maintenance manual . | | 2 | To support the activity of the state board of extension services in the different extension centers located in the following governorates According to the requirements of extension centers in baghdad , Nenava , Tameem , Wasit , Basrah | All year round | As soon as possible |

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|-------------|---|---|---|--|---|---|
| 05-02-00048 | Motor cycles | 1200 Pcs | = | For Agricultral units working with farmer cooperatives | = | = |
| 05-02-00049 | Battery Charger for (NI-CD) batteries (BC-1WDCE). | 4 | = | = | = | = |
| 05-02-00050 | Video Cassette recorder Betacam SP (PVW-2800P) . | 2 | = | = | = | = |
| 05-02-00051 | Video Cassette player Betacam SP (PVW-2650P) for editing . | 2 | = | = | = | = |
| 05-02-00052 | Remote Control Editor (RM-450CE),editing control unit . | 1 | = | = | = | = |
| 05-02-00053 | Color Monitor with quad decoder and standard resolution in line slot mask CRT. Digital. (CVS-37-PS) 14” . | 4 | = | = | = | = |
| 05-02-00054 | (NI-CD) Batteries (NP1A). | 30 | = | = | = | = |
| 05-02-00055 | Metal type cassettes SP with 20 minute ;30 minute ; 60 minute | 150 | = | = | = | = |
| 05-02-00056 | Cables for connections to the editing system | Round | = | = | = | = |
| 05-02-00057 | Dynamic microphone (NEKMIC). | 4 | = | = | = | = |
| 05-02-00058 | Video Cassette recorder V.H.S (multi-system) . | 5 | = | = | = | = |
| 05-02-00059 | Television (multi-system) with remote control . | 10 | = | = | = | = |
| 05-02-00060 | Photograph Camer motors , auto focus . (recently) . | 3 | = | = | = | = |
| 05-02-00061 | Portable Loudspeakers operate with batteries . | 5 | = | = | = | = |
| 05-02-00062 | Portable Audio Recorder . | 2 | = | = | = | = |
| 05-02-00063 | Computer with all the accessories. (recently) . | 2 | = | = | = | = |
| 05-02-00064 | Laser Printer for teaching . | 10 | = | = | = | = |
| 05-02-00065 | Spare parts for all the Audio and Video Equipments . | Round | = | = | = | = |
| 05-02-00066 | Slide projector with the screens . | 5 | = | = | = | = |
| 05-02-00067 | Overhead projector with the screens . | 5 | = | = | = | = |
| 05-02-00068 | Editing Unit for Radio Programm | 1 | = | = | = | = |
| 05-02-00069 | Data Show | 1 | = | = | = | = |
| 05-02-00070 | Overhead Transparencies | 10 | = | = | = | = |
| 05-02-00071 | Field Vehicle | 10 | = | = | = | = |
| 05-02-00072 | Field Vehicle for video show | 2 | = | = | = | = |
| 05-02-00073 | Video Unit 40” | 2 | = | = | = | = |
| 05-02-00074 | Field Soil Analysis Unit | 250 | = | = | = | = |
| 05-02-00075 | Portable Units to measure grain humidity. | 50 | = | = | = | = |
| 05-02-00076 | Airconditioning split units 2-4 Ton | A) 150 Pcs for 2 Tons B) 150 Pcs for 4 Tones | = | = | = | = |
| 05-02-00077 | Cooler machine (for water) | 200 | = | = | = | = |
| 05-02-00078 | Electric Generator 150 K.V. | 2 | = | = | = | = |

E - 2 Requirement for horticulture labrotaries

| Code | Item Description and its complementary items (if applicable) | Intended Use | Qty in unit | Allocation Criteria | Time frame | |
|-------------|---|--|-----------------|---------------------------------|----------------------|-----------------------|
| | | | | | Field Application | Optimal Delivery Time |
| 05-02-00079 | UPVS pipes according to LSO standard 7473-1979 - 110 mm Ø | For green house and Labs. Rehabilitation | 300 m | Hort. comp. Tissue culture lab. | All days in the year | As soon as possible |
| 05-02-00080 | aluminum pipes for RO system 15 mm Ø 20 mm Ø 25 mm ? | For green house and Labs. Rehabilitation | 20 m | Hort. comp. Tissue culture lab. | All days in the year | As soon as possible |
| 05-02-00081 | Fire extinguisher of capacity : 9 type ABC kg 45 on wheels type ABC kg | For green house and Labs. Rehabilitation | 24 m 200 m | Hort. comp. Tissue culture lab. | All days in the year | As soon as possible |
| 05-02-00082 | Supply complete vacuum system with 2 pumps each of 7 l/s discharge . The system shall contain 300l tank , all necessary valves , gages ,switches & an electrical panel | For green house and Labs. Rehabilitation | 10 Nos 3 Nos | Hort. comp. Tissue culture lab. | All days in the year | As soon as possible |
| 05-02-00083 | Vacuum outlets 15 mm Ø | For green house and Labs. Rehabilitation | 1 set | Hort. comp. Tissue culture lab. | All days in the year | As soon as possible |
| 05-02-00084 | Complete RO system with distilled unit of total capacity 2 m ³ /8h & storage capacity of 5 m ³ , with all necessary installations, switches , valves , gages , storage tanks, filters , piping , back washing , & disinfection & electrical panel . | For green house and Labs. Rehabilitation | 8Nos | Hort. comp. Tissue culture lab. | All days in the year | As soon as possible |

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|-------------|--|--|-------|---------------------------------|----------------------|---------------------|
| 05-02-00085 | <p>Liquid Chillers Air Cooled liquid chillers of a capacity of 100 tons (351.6 kw) Rated at 52c ' outdoor air temperature . The chiller shall be operated with 10% by weight ethylene Glycol Solution of inlet/outlet temperature 7.5 c ' / 2c ' respectively . The use of 10% ethylene glycol Solution shall not require a special chiller design . Simply the standard setting equipments in standard water chiller will be set at 2 c ' instead of 4.5 c ' obtained in ordinary water chillers. The chiller shall be suitable for 380v,3ph , 50 hz power supply & outdoor installation</p> | For green house and Labs. Rehabilitation | 1 set | Hort. comp. Tissue culture lab. | All days in the year | As soon as possible |
| 05-02-00086 | <p>Chilled liquid pumps The chilled liquid pump shall be of a capacity 54.5 m3 /hr (240 GPM) rated at a head of 28 meters of water column & 1450 rpm .The pump shall be equipped with suitable mechanical seals that make it leaktight . The pump shall be suitable for 380v,3ph,50hz power Supply</p> | For green house and Labs. Rehabilitation | 2 set | Hort. comp. Tissue culture lab. | All days in the year | As soon as possible |
| 05-02-00087 | <p>Air Duct Heaters. The air duct heaters shall be of the special specifications & of capacities as indicated below . The Heaters shall be of the open coil type consisting of bare wire spiral coiled elements, Nickle Chrome resistance wire . The Heaters shall be Supplied complete with sensor , step controllerrss, contactors , overloads and protection facilities . Any additional Components that will make the heaters be computer controlled , shall be furnished . The heaters shall be fabricated to Fit inside the air ducts of Sizes as indicated below Heater (1) cap.(Kw) 12 No.of Stage 4 Airflow rate (l/s) 3000 Sliplin Direction H Heater (2) cap.(Kw) 30 No.of Stage 5 Airflow rate (l/s) 1320 Sliplin Direction H Heater (3) cap.(Kw) 15 No.of Stage 5 Airflow rate (l/s) 750 Sliplin Direction V Heater (4) cap.(Kw) 36 No.of Stage 4 Airflow rate (l/s) 4300 Sliplin Direction H</p> | For green house and Labs. Rehabilitation | 2 | Hort. comp. Tissue culture lab. | All days in the year | As soon as possible |
| 05-02-00088 | <p>Volume flow rate Controllers The volume flow rate controllers shall be able to control any desired air flow Rate from (0-750) l/s . The controller shall be duct fitted in the supply and exhaust ducts and shall be such equipped that it can be connected and controlled by a central computer system .</p> | For green house and Labs. Rehabilitation | Round | Hort. comp. Tissue culture lab. | All days in the year | As soon as possible |

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|-------------------------------------|---|--|-------|---------------------------------|----------------------------|---------------------|----|------------------------|-----|----|-------------------------------------|-------|-------|-----------------------|-------|-------|------------------------|-------|-------|-----------------------|---|------|---------------------------------|----|----|-------------------------------|-----|-----|--|-------|---------------------------------|----------------------|---------------------|
| 05-02-00089 | <p>Fan Coil Units</p> <p>The fan coil units shall be of floor mounted vertical discharge and face return air inlet . The unit shall have the following features:-</p> <p>-Air Recirculation Rate =2574 L / S</p> <p>-Air condation on coil at minimum room temp= 16°C db & 10.5°C wp</p> <p>Air off coil at minimum room temperature of 16 c ° = 8 c ° db and 6.8 c ° wb -Total Capacity (watts) =25330</p> <p>-Sensible Capacity (watt) = 25330</p> <p>-Entering ethylene glycol (10% by weight) temperature = 4 c °</p> <p>-Ethylene Glycol temperature rise = 5.5 c °</p> <p>The Fan coil shall be of two pipe system complete with three way valve , temperature sensors and actuators that can maintain the desired room temperature within accuracy of +_1c ° maximum. Maintained room air temperature can be setted at any temperature between 16 to 28 c ° .</p> | For green house and Labs. Rehabilitation | Round | Hort. comp. Tissue culture lab. | All days in the year | As soon as possible | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 05-02-00090 | <p>Air Handling Units</p> <p>The air handling units shall be operated with totally fresh air and they shall have a total static pressare equal to the specified external static pressure plus the Internal static pressure which shall be specified and added by the unit manufacturer.</p> <p>AHU1 AHU2</p> <table border="0"> <tr> <td>Air flow rate (l/s)</td> <td>3000</td> <td>1340</td> </tr> <tr> <td>Total cooling capacity(KW)</td> <td>190</td> <td>57</td> </tr> <tr> <td>Sensible Capacaity(KW)</td> <td>155</td> <td>56</td> </tr> <tr> <td>Chilled liquid temperature in/out c</td> <td>2/7.5</td> <td>2/7.5</td> </tr> <tr> <td>Air on coil c ° db/Wb</td> <td>47/24</td> <td>2/7.5</td> </tr> <tr> <td>Air off coil c ° db/Wb</td> <td>6/5.6</td> <td>14/13</td> </tr> <tr> <td>Apparatus dew point C</td> <td>5</td> <td>12.5</td> </tr> <tr> <td>External static pressure, MmH2O</td> <td>15</td> <td>15</td> </tr> <tr> <td>Chilled liquid flow rate, l/s</td> <td>8.3</td> <td>2.5</td> </tr> </table> <p>Type of Filters</p> <p>Washable type prefilters AHU1</p> <p>Washable type prefilters AHU2</p> <p>Medium efficiency bag filters AHU1</p> <p>Medium efficiency Bag filters AHU2</p> <p>99.97 efficiency HEPA absolute filters AHU1</p> <p>99.97 efficiency HEP A absolute filters AHU2 4-18C AHU1</p> | Air flow rate (l/s) | 3000 | 1340 | Total cooling capacity(KW) | 190 | 57 | Sensible Capacaity(KW) | 155 | 56 | Chilled liquid temperature in/out c | 2/7.5 | 2/7.5 | Air on coil c ° db/Wb | 47/24 | 2/7.5 | Air off coil c ° db/Wb | 6/5.6 | 14/13 | Apparatus dew point C | 5 | 12.5 | External static pressure, MmH2O | 15 | 15 | Chilled liquid flow rate, l/s | 8.3 | 2.5 | For green house and Labs. Rehabilitation | Round | Hort. comp. Tissue culture lab. | All days in the year | As soon as possible |
| Air flow rate (l/s) | 3000 | 1340 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total cooling capacity(KW) | 190 | 57 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Sensible Capacaity(KW) | 155 | 56 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Chilled liquid temperature in/out c | 2/7.5 | 2/7.5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Air on coil c ° db/Wb | 47/24 | 2/7.5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Air off coil c ° db/Wb | 6/5.6 | 14/13 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Apparatus dew point C | 5 | 12.5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| External static pressure, MmH2O | 15 | 15 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Chilled liquid flow rate, l/s | 8.3 | 2.5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 05-02-00090 | <p>After coil air temperature range controlled by the three way valve 4-18C AHU1</p> <p>Standard range AHU2</p> <p>Power supply available 380-3ph-50Hz</p> <p>220-1ph-50Hz</p> | For green house and Labs. Rehabilitation | Round | Hort. comp. Tissue culture lab. | All days in the year | As soon as possible | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 05-02-00091 | <p>05-02-0009105-02-0009205-02-0009305-02-0009405-02-0009505-02-00096 Steam Humidifiers shall be specified in item (15) and specially specified in of electrically operated humidifiers with a Microprocessor control system and with steam distributing pipes for installation in duct work, The unit shall be such equipped so that it may be controlled by a central computer system suitable humidity sensors and actuators shall be provided - steam out put Range 2-30 Kg/hr - Power consumption 20Kw maximum - Power supply 380V-3Ph-50HZ - 220v-1ph-50HZ</p> | For green house and Labs. Rehabilitation | 4 | Hort. comp. Tissue culture lab. | All days in the year | As soon as possible | | | | | | | | | | | | | | | | | | | | | | | | | | | |

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|-------------|--|--|-------|---------------------------------|----------------------|---------------------|
| 05-02-00092 | <p>Main distribution board (M.D.B) consist of - One 4-pole Air circuit breaker 1600 Af, 600 Volts with over current and short circuit protection facilities . - One manual change over switch TP&N 1600A 600 Volts - Seven MecB"S 100AF 4-pole with settings 100AT, 75AT, 75AT, 75T, 75AT, 50AT& 30AT respectively. 600 Volt ratings - Two MCCB"S 225AF p-pole 600 Volts with setting 150AT & 200AT respectively . - One voltmeter (0-500V) with selector switch (4-Positions) Complete with its potential transformers and protective fuses. - Three indicating lamps The main distribution board shall be dust and vermin proof manufactured with rigid and compact steel structure of free standing type suitable on operation on 400V, 50Hz 3-phase systems . All steel shall be finally finished with enamel paint . The panel shall be in sections for easy assembly .</p> | For green house and Labs. Rehabilitation | 1 | Hort. comp. Tissue culture lab. | All days in the year | As soon as possible |
| 05-02-00093 | <p>Distribution panel (AC.D.B) consist of - One 4-Pole Load break isolator 1200A 600 Volts (Main isolator) - Four 4-pole MCCB"S 100AF, 100AT 600Volts - Fourteen 4-pole MCCB"S 100AF setted as follows :30AT / No.160AT / No.1275AT/ No.1 - Two single -pole MCB 30A, 250V . - Four single -pole MCB 15A, 250 V. - Four 100A 3-pole contactor, with thermal over load protection, push- button type. - One 60A 3-pole contactor, with thermal ovr load protection - TP&N+E busbar system 1200A , 400 Volts - Three Ammeters (0-60A) with current transformers (one for each contactor outlet) - one Ammeter(0 - 30 A) with its current transformer (for contactor outlet with 30AT setting MCCB) - one voltmeter (0-500V) With its 4-position selector switch, potential transformer and protective fuses (Fitted on the main incoming door) .</p> | | | Hort. comp. Tissue culture lab. | All days in the year | As soon as possible |
| 05-02-00093 | <p>- One 4-Pole Load break isolator 1200A 600 Volts (Main isolator) - Two 4-pole MCCB'S 600AF, 450AT 600 volts - One indicating lamp for each panel supplying load through contactor device . - Five indicating lamps for each panel supplying reheater loads (6 panels) fitted with MCCB'S rating 75AT, & 5X60AT. The AC.D.B. Specification is the same as item 1 in consideration of its construction .</p> | For green house and Labs. Rehabilitation | Round | Hort. comp. Tissue culture lab. | All days in the year | As soon as possible |

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|-------------|--|--|-----------------|---------------------------------|----------------------|---------------------|
| 05-02-00094 | Luminaire (Lighting Fitting) 2X40 w Fluorescent with louver recessed type suitable for falseceiling mounting type (F1) similar to Philips TBS 31ZL or equivalent . Complete with starting gears.lampholders, lamps &power factor capacitor. | For green house and Labs. Rehabilitarion | 75 | Hort. comp. Tissue culture lab. | All days in the year | As soon as possible |
| 05-02-00095 | Ditto –but suitable for direct mounting on walls or surfaces. (type F2) | For green house and Labs. Rehabilitarion | 40 | Hort. comp. Tissue culture lab. | All days in the year | As soon as possible |
| 05-02-00096 | Fluorescent luminaire 220 V,2x40w with rapid starting ballast with universal reflector complete with lamp holders, lamps & power factor correction capacitor. Similar to Philips GM x250 /36-40w. or equivalent.(Type F3) | For green house and Labs. Rehabilitarion | 30 | Hort. comp. Tissue culture lab. | All days in the year | As soon as possible |
| 05-02-00097 | Fluorescent luminaire 220 V,2x40w with prismatic bottom & Side cover suitable for coupling arrangements in row group . complete with lamp holders ,lamps & correction factor capacitor. .(Type F4) | For green house and Labs. Rehabilitarion | 50 | Hort. comp. Tissue culture lab. | All days in the year | As soon as possible |
| 05-02-00098 | 1x 500 mm2 PVC insulated with steel taped armoured cable PVC sheathed for under ground use. | For green house and Labs. Rehabilitarion | 300 M. L | Hort. comp. Tissue culture lab. | All days in the year | As soon as possible |
| 05-02-00099 | 750 KVA 3-pare 400V emergency diesel engine driven generator .with automatic & manual change over system complete with its control panel suitable for outdoor installation in tropical climatic conditions(- 8 C ' to 50 C ') | For green house and Labs. Rehabilitarion | 1 SET | Hort. comp. Tissue culture lab. | All days in the year | As soon as possible |
| 05-02-00100 | 24 hours electronic timing switch three-phase 100 A , 400 Volts ratings. | For green house and Labs. Rehabilitarion | 6 | Hort. comp. Tissue culture lab. | All days in the year | As soon as possible |
| 05-02-00101 | Kiosk type Substation 1000 KVA , 11000/410 /230 Volts consists of the following Section : High tension Side: - One 600 A ,12KV H.T circuit breaker type VCB or SF6 provided switch over lood & short circuit facilities. | For green house and Labs. Rehabilitarion | 1 | Hort. comp. Tissue culture lab. | All days in the year | As soon as possible |
| 05-02-00102 | - 12 KV 600 A TP busbar system . - One Lood break swith 12KV,400A. - Three ammeters (0-600A) with their current transformers & accenories. - One voltmeter (0-13KV) with its selector switch (3-position) complete with its potential transformers & the protecting devices. - One KWH meter. - One 1000 KVA 11000/410 /230 Volt oil immersed naturally cooled transformer with all necessary protecting devices. - Low tension Side: - One air circuit breaker (ACB) 600A 600 Volts with overload & short circuit protection. - 2000 A, TP & N + E busbar system 400 Volts. - Two 1600 lood break switch (LBS) tripple-pole 400V. - One 300 AF MCCB tripple-pole 400V. - One 100 AF MCCB tripple-pole 400V. - Three ammeters (0-1500A) with their current transformers. - One Voltmeter (0-500V) with its selector switch (4-positions) & potential transformers with their protective devices. - One power factor meter.Three indicating lamps for mains ON. | For green house and Labs. Rehabilitarion | 1 complete unit | Hort. comp. Tissue culture lab. | All days in the year | As soon as possible |

F: Requirements for Agricultural Bulletins, Magazines, Pamphlets for research and extension

| CODE NO. | DESCRIPTION | INTENDED USE (AND TARGETED END USER) | QTY IN UNIT | ALLOCATION CRITERIA | TIME FRAME | |
|----------|-------------|---------------------------------------|-------------|---------------------|-------------------|------------------|
| | | | | | FILED APPLICATION | OPTIMAL DELIVERY |

| | | | | | | |
|-------------|--|--|------------------------|--|-----------------|---------------------|
| 05-02-00103 | Peper different sizes | To be used in printing Agricultural Bulletins, Magazines, Pamphlets for research and extension | 60 MT | For Ministry of Agriculture and state board of extension printing activities | All year around | AS SOON AS POSSIBLE |
| 05-02-00104 | Cartoon paper for filing different sizes | To be used in printing Agricultural Bulletins, Magazines, Pamphlets for research and extension | 30 MT | For Ministry of Agriculture and state board of extension printing activities | All year around | AS SOON AS POSSIBLE |
| 05-02-00105 | Carbon paper for typing | To be used in printing Agricultural Bulletins, Magazines, Pamphlets for research and extension | 60 Boxes, 50 pack each | For Ministry of Agriculture and state board of extension printing activities | All year around | AS SOON AS POSSIBLE |
| 05-02-00106 | Stensil paper for typing | To be used in printing Agricultural Bulletins, Magazines, Pamphlets for research and extension | 60 Boxes, 50 pack each | For Ministry of Agriculture and state board of extension printing activities | All year around | AS SOON AS POSSIBLE |
| 05-02-00107 | Writing ink (Coulour Blue + Black) | To be used in printing Agricultural Bulletins, Magazines, Pamphlets for research and extension | 5000 Bottle | For Ministry of Agriculture and state board of extension printing activities | All year around | AS SOON AS POSSIBLE |
| 05-02-00108 | Correcting ink (White) | To be used in printing Agricultural Bulletins, Magazines, Pamphlets for research and extension | 2000 bottle | For Ministry of Agriculture and state board of extension printing activities | All year around | AS SOON AS POSSIBLE |
| 05-02-00109 | A) Pins | To be used in printing Agricultural Bulletins, Magazines, Pamphlets for research and extension | 5000 Pack | For Ministry of Agriculture and state board of extension printing activities | All year around | AS SOON AS POSSIBLE |
| | B) Clips | | 5000 Pack | | | |
| | C) Clippers different types | | 2000 Pack | | | |
| 05-02-00110 | Printing ink different colores | To be used in printing Agricultural Bulletins, Magazines, Pamphlets for research and extension | 200 Kg | For Ministry of Agriculture and state board of extension printing activities | All year around | AS SOON AS POSSIBLE |
| 05-02-00111 | Computer papers different types | To be used in printing Agricultural Bulletins, Magazines, Pamphlets for research and extension | 1500 Pack | For Ministry of Agriculture and state board of extension printing activities | All year around | AS SOON AS POSSIBLE |
| 05-02-00112 | Different cartridges and ribbins for computer printers | To be used in printing Agricultural Bulletins, Magazines, Pamphlets for research and extension | 1500 Pcs | For Ministry of Agriculture and state board of extension printing activities | All year around | AS SOON AS POSSIBLE |
| 05-02-00113 | Printing plet different sizes | To be used in printing Agricultural Bulletins, Magazines, Pamphlets for research and extension | 300 Pcs | For Ministry of Agriculture and state board of extension printing activities | All year around | AS SOON AS POSSIBLE |
| 05-02-00114 | Binding materia different sizes | To be used in printing Agricultural Bulletins, Magazines, Pamphlets for research and extension | 6000 M2 | For Ministry of Agriculture and state board of extension printing activities | All year around | AS SOON AS POSSIBLE |
| 05-02-00115 | Glue for binding | To be used in printing Agricultural Bulletins, Magazines, Pamphlets for research and extension | 100 Kg | For Ministry of Agriculture and state board of extension printing activities | All year around | AS SOON AS POSSIBLE |
| 05-02-00116 | Ink for photo copy machines | To be used in printing Agricultural Bulletins, Magazines, Pamphlets for research and extension | 500 pack | For Ministry of Agriculture and state board of extension printing activities | All year around | AS SOON AS POSSIBLE |

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|-------------|---|--|--------------------------------|--|-----------------|---------------------|
| 05-02-00117 | Rechargable hand light | To be used in printing Agricultural Bulletins, Magazines, Pamphlets for research and extension | 150 Pcs | For Ministry of Agriculture and state board of extension printing activities | All year around | AS SOON AS POSSIBLE |
| 05-02-00118 | Chemicals for typing Developers A) | To be used in printing Agricultural Bulletins, Magazines, Pamphlets for research and extension | 100 Kg | For Ministry of Agriculture and state board of extension printing activities | All year around | AS SOON AS POSSIBLE |
| | B) Correction | | 100 Kg | | | |
| | C) Replex | | 100 Kg | | | |
| 05-02-00119 | Paper shredder | To be used in printing Agricultural Bulletins, Magazines, Pamphlets for research and extension | 70 Pcs | For Ministry of Agriculture and state board of extension printing activities | All year around | AS SOON AS POSSIBLE |
| 05-02-00120 | Electrical cleaning machine | To be used in printing Agricultural Bulletins, Magazines, Pamphlets for research and extension | 70 Pcs | For Ministry of Agriculture and state board of extension printing activities | All year around | AS SOON AS POSSIBLE |
| 05-02-00121 | Stand-by emergency lamp + Batteries | To be used in printing Agricultural Bulletins, Magazines, Pamphlets for research and extension | 200 Pcs | For Ministry of Agriculture and state board of extension printing activities | All year around | AS SOON AS POSSIBLE |
| 05-02-00122 | Colore sperator with accessories | To be used in printing Agricultural Bulletins, Magazines, Pamphlets for research and extension | 2 | For Ministry of Agriculture and state board of extension printing activities | All year around | AS SOON AS POSSIBLE |
| 05-02-00123 | Film processor with accessories | To be used in printing Agricultural Bulletins, Magazines, Pamphlets for research and extension | 2 | For Ministry of Agriculture and state board of extension printing activities | All year around | AS SOON AS POSSIBLE |
| 05-02-00124 | Software for colore sperator | To be used in printing Agricultural Bulletins, Magazines, Pamphlets for research and extension | 4 | For Ministry of Agriculture and state board of extension printing activities | All year around | AS SOON AS POSSIBLE |
| 05-02-00125 | Card printer with spare parts and accessories | To be used in printing Agricultural Bulletins, Magazines, Pamphlets for research and extension | 3 | For Ministry of Agriculture and state board of extension printing activities | All year around | AS SOON AS POSSIBLE |
| 05-02-00126 | Digital camera (Computer connectable) | To be used in printing Agricultural Bulletins, Magazines, Pamphlets for research and extension | 4 | For Ministry of Agriculture and state board of extension printing activities | All year around | AS SOON AS POSSIBLE |
| 05-02-00127 | Computer system with accessories | To be used in printing Agricultural Bulletins, Magazines, Pamphlets for research and extension | 3 | For Ministry of Agriculture and state board of extension printing activities | All year around | AS SOON AS POSSIBLE |
| 05-02-00128 | Printing scanner | To be used in printing Agricultural Bulletins, Magazines, Pamphlets for research and extension | 3 | For Ministry of Agriculture and state board of extension printing activities | All year around | AS SOON AS POSSIBLE |
| 05-02-00129 | Computer laser printer | To be used in printing Agricultural Bulletins, Magazines, Pamphlets for research and extension | 5 Pcs (2 Colored + 3 ordinary) | For Ministry of Agriculture and state board of extension printing activities | All year around | AS SOON AS POSSIBLE |
| 05-02-00130 | Resiograph printer with accessories and ink, films, rolls | To be used in printing Agricultural Bulletins, Magazines, Pamphlets for research and extension | 2 | For Ministry of Agriculture and state board of extension printing activities | All year around | AS SOON AS POSSIBLE |

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|-------------|---|--|--------------|--|-----------------|---------------------|
| 05-02-00131 | Plet developer machine 50X70 cm | To be used in printing Agricultural Bulletins, Magazines, Pamphlets for research and extension | 2 | For Ministry of Agriculture and state board of extension printing activities | All year around | AS SOON AS POSSIBLE |
| 05-02-00132 | Map printer machine (roll type 90 cm) | To be used in printing Agricultural Bulletins, Magazines, Pamphlets for research and extension | 2 | For Ministry of Agriculture and state board of extension printing activities | All year around | AS SOON AS POSSIBLE |
| 05-02-00133 | U.V. dryer for packing (50X70cm) | To be used in printing Agricultural Bulletins, Magazines, Pamphlets for research and extension | 2 | For Ministry of Agriculture and state board of extension printing activities | All year around | AS SOON AS POSSIBLE |
| 05-02-00134 | Golden foiling machine with accessories and powder | To be used in printing Agricultural Bulletins, Magazines, Pamphlets for research and extension | 2 | For Ministry of Agriculture and state board of extension printing activities | All year around | AS SOON AS POSSIBLE |
| 05-02-00135 | Photo copying machines with accessories and spare parts | To be used in printing Agricultural Bulletins, Magazines, Pamphlets for research and extension | 100 | For Ministry of Agriculture and state board of extension printing activities | All year around | AS SOON AS POSSIBLE |
| 05-02-00136 | complete sewing head | | 20 | | | |
| 05-02-00137 | HEAT EXCHANGER TUBES | | 24729 PCS | | | |