

**ANNEX AGRI/12
PLANT PRODUCTION INPUTS**

ANNEX AGRI/12 A - SEED REQUIREMENT AND ALLOCATION

| Code | Item Description | Unit | Total Qty | Proposed Allocation | | | Intended use |
|-------------|---|------|-----------|---------------------|------|-------|---------------------------------|
| | | | | DHK | ERB | SUL | |
| 05-12-00001 | Tomato Seeds | M.T | 3 | 0.69 | 1.02 | 1.29 | Vegetable crop and tomato paste |
| 05-12-00002 | Sunflower Seeds | M.T | 95 | 22 | 32 | 41 | Oil extracting industry |
| 05-12-00003 | Sesame Seeds | M.T | 10 | 2.3 | 3.4 | 4.3 | Oil extracting industry |
| 05-12-00004 | Cotton Seeds | M.T | 10 | 0 | 0 | 10 | Industrial crop |
| 05-12-00005 | Cucumber Seeds | M.T | 2 | 0.345 | 1.01 | 0.645 | Vegetable crop |
| 05-12-00006 | Watermelon Seeds | M.T | 3 | 0.69 | 1.02 | 1.29 | Vegetable crop |
| 05-12-00007 | Onion Seeds | M.T | 3 | 0.36 | 1.02 | 1.29 | Vegetable crop |
| 05-12-00008 | Pepper Seeds | M.T | 1 | 0.23 | 0.34 | 0.43 | Vegetable crop |
| 05-12-00009 | Soybean Seeds | M.T | 5 | 1.15 | 1.7 | 2.15 | Poultry feeds |
| 05-12-00010 | Squash Seeds | M.T | 1.5 | 0.345 | 0.51 | 0.645 | Vegetable crop |
| 05-12-00011 | Corn Seeds | M.T | 30 | 6.9 | 10.2 | 12.9 | Poultry feeds |
| 05-12-00012 | Forage Seeds (2 varieties) and inoculant Bacteria | M.T | 12.06 | 2.82 | 4.08 | 5.16 | Animal feeds |

Total Estimated Budget US\$ 1,234,000

Quantity subject to market price and/or reschedule of fund at time of procurement

ANNEX AGRI / 12 B – FERTILIZER REQUIREMENT AND ALLOCATION

| Code | Item Description | Unit | Total Qty | Proposed Allocation | | | Intended use | Complimentary items | Optimal | Optimal | Target Beneficiaries Area (Ha) |
|-------------|------------------|------|-----------|---------------------|------|------|--------------------------------|-------------------------|------------------|---------------|--------------------------------|
| | | | | DHK | ERB | SUL | | | Application Date | Delivery Date | |
| 05-12-00013 | Fertilizer (DAP) | M.T | 3530 | 812 | 1200 | 1518 | Cereals crop, vegetable s crop | Seeds 05-12-00001-00012 | Oct. 2000 | Sep. 2000 | 22063 |

Total Estimated Budget US\$ 865,000

Quantity subject to market price and/or reschedule of fund at time of procurement

ANNEX AGRI / 12 C – HORTICULTURE IMPROVEMENT

| Code | Item Description | Unit | Total Qty | Proposed Allocation | | | Intended use | Complim entary items | Optimal Applica tion Date | Optimal Delivery Date | Target Beneficia ries Area (Ha) |
|-------------|--|---------|--------------|---------------------|-----|-----|--|---|------------------------------------|-----------------------------|--|
| | | | | DHK | ERB | SUL | | | | | |
| 05-12-00014 | Rehabilitation of 3 Nurseries in 3 governorates | Nursery | 3 | 1 | 1 | 1 | Productio n of improved varieties of fruit seedling | 05-12- 00016 | Jul-00 | Jun-00 | 19.25 |
| 05-12-00015 | Protected vegetable seedlings and citrus seedling production | Donum | 320 | 0 | 0 | 320 | Early vegetable seedlings productio n and improve | 05-12- 00001 05-12- 00005-8 05-12- 00010 | Jul-00 | Jun-00 | 80 |

Total Estimated Budget US\$ 208,789

Quantity subject to market price and/or reschedule of fund at time of procurement

ANNEX AGRI / 12 - D – CLEANING THE LANDS FROM BARRACKS DURING THE WAR

| Code | Item Description | Unit | Total Qty | Proposed Allocation | | | Intended use | Complim entary items | Optimal Applica tion Date | Optimal Delivery Date | Target Beneficia ries Area (Ha) |
|-------------|-----------------------------|-------|--------------|---------------------|-------|-------|---------------------|----------------------------|------------------------------------|-----------------------------|--|
| | | | | DHK | ERB | SUL | | | | | |
| 05-12-00016 | Land cleaning from barracks | Donum | 40000 | 9200 | 13600 | 17200 | Increasin g crop | 05-12- 00014 | Apr. 2000 | Mar-00 | 10000 |

Total Estimated Budget US\$ 150,000

Quantity subject to market price and/or reschedule of fund at time of procurement

ANNEX AGRI / 12 E - POST PRODUCTION CAPACITY BUILDING AND SOIL FERTILITY STUDY

| Code | Item Description | Unit | Total Qty | Proposed Allocation | | | Intended use | Compli mentary items | Optimal Applicat ion Date | Optimal Delivery Date | T a r g e t B e n e f i c i a r i e s A r e a (H a) |
|-------------|---------------------|--------------|--------------|---------------------|-----|-----|--|--|---------------------------------|-----------------------------|---|
| | | | | DHK | ERB | SUL | | | | | |
| 05-12-00017 | On farm storage | Farm storage | 8.70% | 23% | 34% | 43% | Post production | 05-12-00002-4 05-12-00009 05-12-00011 05-12-00012 | Jun-00 | May-00 | |
| 05-12-00018 | Soil fertility | Sample | Bulk | 23% | 34% | 43% | Fertilizer application for crop production | 05-12-00001 05-12-00005-8 05-12-00010 | Sept. 2000 | Aug. 2000 | |

Total Estimated Budget US\$ 207,211

Quantity subject to market price and/or reschedule of fund at time of procurement

| Code | Item Description | Unit | Total Qty | Proposed Allocation | | | Intended use |
|---------------|--|------|-----------|---------------------|-------|-------|---|
| | | | | DHK | ERB | SUL | |
| 05-12-00019 | Barley Seed | M.T | 15000 | 3450 | 5100 | 6450 | Vegetable crop |
| 05-12-00020-A | Field Pea Seed-Dun type, suitable for forage and animal feed | M.T | 250 | 57.5 | 85 | 107.5 | Animal feed |
| 05-12-00020-B | Field Pea Seed. Early maturing type with yellow coty ledons for human consumption. | M.T | 250 | 57.5 | 85 | 107.5 | Vegetable crop |
| 05-12-00021 | Vetch seed for forags any named species including Vicia Villosa, V. dasycarpa or V. narbonensis. | MT | 400 | 92 | 136 | 172 | Animal feed |
| 05-12-00022 | Lathyrus. Suitable for forage and feed any named species | M.T | 100 | 23 | 34 | 43 | Animal feed |
| 05-12-00023 | Fertilizer: Compound 27:27:0 for cereal crop | M.T | 75800 | 3289 | 66362 | 6149 | Cereals crop, vegetables crop and orchards stands |
| 05-12-00024 | Fertilizer: DAP Diammonium Phosphate18:46:0 + 0.2 % Zinc for forage crops. | M.T | 3000 | 690 | 1020 | 1290 | Cereals crop, vegetables crop and orchards stands |
| 05-12-00025 | Compound Fertilizer 4:7:7:13:15: (N=4, P=7, K=7, S=13 and Ca=15) for vegetable crops | M.T | 9000 | 345 | 8010 | 645 | Cereals crop, vegetables crop and orchards stands |

| ANNEX AGRI/ 12 - PLANT PRODUCTION | | | |
|-----------------------------------|---|---|-----|
| Input | I- Instrument, Machines, Chemicals, Cultivars and Tools | | |
| | <i>1- Instrument, Machines, Chemicals ...etc.</i> | | |
| 05-12-00027 | Horizontal laminar flow hood for two persons | 1 | Pcs |
| 05-12-00028 | Climatic chamber -5 to +50 3801. (incubator) | 2 | Pcs |
| 05-12-00029 | Climatic chamber -20 to +20 1621. (incubator) | 2 | Pcs |
| 05-12-00030 | Autoclave 140 L. | 1 | Pcs |
| 05-12-00031 | Horizontal autoclave 500 L. | 1 | Pcs |
| 05-12-00032 | Stereoscope binocular microscope | 1 | Pcs |
| 05-12-00033 | Binocular microscope with camera and camera lucida | 1 | Pcs |
| 05-12-00034 | Laboratory benches | 2 | Pcs |
| 05-12-00035 | Magnetic stirrer | 2 | Pcs |
| 05-12-00036 | PH meter | 2 | Pcs |
| 05-12-00037 | Sealing bag machine | 1 | Pcs |
| 05-12-00038 | Computer data base | 1 | Pcs |
| 05-12-00039 | Forklift | 1 | Pcs |
| 05-12-00040 | Steam soil sterilizer | 1 | Pcs |
| 05-12-00041 | Transferring device for mineral oil | 1 | Pcs |
| 05-12-00042 | Trolley | 4 | Pcs |

| | | | |
|-------------|---|-------|-----|
| 05-12-00043 | Cropping houses 200 m2 each (for Oyster Mushroom) | 1 | Pcs |
| 05-12-00044 | Technical balance + vibration damping table | 1 | Pcs |
| 05-12-00045 | Precision balance + vibration damping table | 1 | Pcs |
| 05-12-00046 | Hygrothermograph | 4 | Pcs |
| 05-12-00047 | Straw chopper | 1 | Pcs |
| 05-12-00048 | Edible fungi dryer machine | 1 | Pcs |
| 05-12-00049 | Temperature moisture manual measurer | 3 | Pcs |
| 05-12-00050 | Dry stove + 50 to 250 | 1 | Pcs |
| 05-12-00051 | Bags filling machines (for saprophytic Mushroom rather than white button) | 2 | Pcs |
| 05-12-00052 | Spectrophotometer | 1 | Pcs |
| 05-12-00053 | Rotary evaporator | 1 | Pcs |
| 05-12-00054 | Vortex mixer | 1 | Pcs |
| 05-12-00055 | Electrical conductivity meter | 2 | Pcs |
| 05-12-00056 | High speed cooling centrifuge | 1 | Pcs |
| 05-12-00057 | High speed blender base | 1 | Pcs |
| 05-12-00058 | Moisture and acidity meter. | 5 | Pcs |
| 05-12-00059 | Digital max-min thermometer | 5 | Pcs |
| 05-12-00060 | Remote reading thermometer | 5 | Pcs |
| 05-12-00061 | Aluminum substrate thermometer | 3 | Pcs |
| 05-12-00062 | Pocket thermometer | 10 | Pcs |
| 05-12-00063 | Polythermal professional hygrometer | 3 | Pcs |
| 05-12-00064 | Psychrometer | 3 | Pcs |
| 05-12-00065 | Humidifiers | 2 | Pcs |
| 05-12-00066 | Professional digital NH3 meter | 2 | Pcs |
| 05-12-00067 | Blower | 1 | Pcs |
| 05-12-00068 | Substrate agitator | 2 | Pcs |
| 05-12-00069 | Thermohygrometer | 4 | Pcs |
| 05-12-00070 | Spawning bed thermometer | 10 | Pcs |
| 05-12-00071 | Roses | 10 | Pcs |
| 05-12-00072 | Sealing polystyrene container machine | 1 | Pcs |
| 05-12-00073 | Car with Tanker of 20,000 L. | 1 | Pcs |
| 05-12-00074 | Generator | 1 | Pcs |
| 05-12-00075 | Compost turning machine | 1 | Pcs |
| 05-12-00076 | Electrophorsis unit with power supply | 1 | Pcs |
| 05-12-00077 | Cold store room | 1 | Pcs |
| 05-12-00078 | Water distiller with resin | 1 | Pcs |
| 05-12-00079 | Deionized water distiller with resin | 1 | Pcs |
| 05-12-00080 | Water bath | 2 | Pcs |
| 05-12-00081 | Oven | 2 | Pcs |
| 05-12-00082 | Microtome | 1 | Pcs |
| 05-12-00083 | Co2 and O2 meter (mobile) | 1 | Pcs |
| 05-12-00084 | Co2 and O2 analyzer | 1 | Pcs |
| | 2- Chemicals | | |
| 05-12-00085 | Agar-agar | 5,000 | gm |
| 05-12-00086 | Glucose | 2,500 | gm |
| 05-12-00087 | Sucrose | 2,500 | gm |

| | | | |
|-------------|---|-------|--------|
| 05-12-00088 | Mineral oil (paraphine) | 2,500 | gm |
| 05-12-00089 | 2,4 Dimethyl glucose | 200 | gm |
| 05-12-00090 | 2,3,4 Trimethyl glucose | 200 | gm |
| 05-12-00091 | 2,3,4,6 Tetramethyl glucose | 200 | gm |
| 05-12-00092 | Glucan | 200 | gm |
| 05-12-00093 | Mannan | 200 | gm |
| 05-12-00094 | Glucomannan | 200 | gm |
| 05-12-00095 | Duolite A-7 | 1,500 | gm |
| 05-12-00096 | Sephadex 50 | 2,500 | gm |
| 05-12-00097 | Sephadex 75 | 2,500 | gm |
| 05-12-00098 | Sephadex 100 | 2,500 | gm |
| 05-12-00099 | Sephadex 150 | 2,500 | gm |
| 05-12-00100 | Sephadex 200 | 2,500 | gm |
| 05-12-00101 | Agarose | 2,500 | gm |
| 05-12-00102 | PAGE " poly acrilimide gel electrophoresis". | 200 | gm |
| 05-12-00103 | Silica gel | 2,000 | gm |
| 05-12-00104 | Tris-base buffer | 3 | L |
| 05-12-00105 | Tris-Acid buffer | 3 | L |
| 05-12-00106 | SDS (sodium dodecyl sulfate) | 1 | Kg |
| 05-12-00107 | Acrylamide | 1 | Kg |
| 05-12-00108 | Amm. Persulfate | 1 | Kg |
| 05-12-00109 | Glycine | 2 | L |
| 05-12-00110 | Lysozyme | 2 | Ampule |
| 05-12-00111 | Standard proteins low m.w | 2 | Ampule |
| 05-12-00112 | Standard proteins High m.w | 2 | Ampule |
| 05-12-00113 | Sephacryl- S-200 | 1 | Kg |
| 05-12-00114 | Sephacry-S-300 | 1 | Kg |
| 05-12-00115 | Sephacry-S-400 | 1 | Kg |
| 05-12-00116 | Sephacry-S-1000 | 1 | Kg |
| 05-12-00117 | Dithiothreitol | 1 | L |
| 05-12-00118 | 2- Mercapto ethanol | 1 | L |
| 05-12-00119 | (DNS0 coinotrosylsilic acid | 2 | Kg |
| 05-12-00120 | Standard enzymes (Amylases + proteases + polyphenol oxidase + lacase) | 8 | Ampule |
| 05-12-00121 | Trypane blue | 250 | mL |
| 05-12-00122 | Glycerin oil | 1 | L |
| 05-12-00123 | Lactic acid | 2 | L |
| 05-12-00124 | Lacto phenol | 500 | mL |
| 05-12-00125 | Sodium tangestate | 500 | g |
| 05-12-00126 | 150 propanol | 2 | L |
| 05-12-00127 | Dextrose | 2 | Kg |
| 05-12-00128 | Lactophenol | 500 | mL |
| 05-12-00129 | Yeast extract | 1 | Kg |
| 05-12-00130 | Malt extract | 2 | Kg |
| 05-12-00131 | Peptone | 500 | g |
| 05-12-00132 | Corn meal agar | 2 | Kg |
| 05-12-00133 | Cotton Blue | 500 | mL |
| 05-12-00134 | Aniline oil | 1 | L |
| 05-12-00135 | Henry's reagent (TI.4) | 500 | mL |

| | | | |
|-------------|------------------------|-----|----|
| 05-12-00136 | melzer's reagent | 250 | g |
| 05-12-00137 | NaoH | 2 | Kg |
| 05-12-00138 | KOH | 2 | Kg |
| 05-12-00139 | Fe So4 | 1 | Kg |
| 05-12-00140 | NH4 OH | 2 | Kg |
| 05-12-00141 | Fe2 Cl6 | 1 | Kg |
| 05-12-00142 | Thallium oxide | 500 | gm |
| 05-12-00143 | Na2 Co3 | 2 | Kg |
| 05-12-00144 | Na HCo3 | 2 | Kg |
| 05-12-00145 | HCl | 3 | L |
| 05-12-00146 | H2So4 | 3 | L |
| 05-12-00147 | HNo3 | 3 | L |
| 05-12-00148 | Phenol | 1 | Kg |
| 05-12-00149 | carbolic acid | 1 | Kg |
| 05-12-00150 | Phenol aniline | 200 | mL |
| 05-12-00151 | Guaicol | 100 | g |
| 05-12-00152 | Guaiacum | 100 | g |
| 05-12-00153 | Naphthol | 1 | L |
| 05-12-00154 | Chloral hydrate | 1 | Kg |
| 05-12-00155 | Iodine | 500 | mL |
| 05-12-00156 | KI (potassium iodide) | 500 | g |
| 05-12-00157 | Congo red | 100 | g |
| 05-12-00158 | Rose bengal | 100 | g |
| 05-12-00159 | Phloxine A | 250 | g |
| 05-12-00160 | Phenol Crystals | 500 | g |
| 05-12-00161 | Potassium iodide | 500 | g |
| 05-12-00162 | Mercury chloride | 500 | g |
| 05-12-00163 | Potassium dichromate | 500 | g |
| 05-12-00164 | KH2 Po4 | 1 | Kg |
| 05-12-00165 | NaNo3 | 1 | Kg |
| 05-12-00166 | Mg So4.7H2O | 1 | Kg |
| 05-12-00167 | KCl | 1 | Kg |
| 05-12-00168 | Fe So4.7H2O | 1 | Kg |
| 05-12-00169 | NH4Cl | 1 | Kg |
| 05-12-00170 | Ferric ammoniumcitrate | 1 | Kg |
| 05-12-00171 | CaCl2 | 1 | Kg |
| 05-12-00172 | Na- K phosphte buffer | 2 | L |
| 05-12-00173 | KNo2 | 1 | Kg |
| 05-12-00174 | K2H Po4 | 1 | Kg |
| 05-12-00175 | Fe Cl3 | 1 | Kg |
| 05-12-00176 | Lactose | 1 | Kg |
| 05-12-00177 | Nacl | 1 | Kg |
| 05-12-00178 | Glutamic acid | 1 | Kg |
| 05-12-00179 | H3Bo3 | 1 | Kg |
| 05-12-00180 | Fe (NH4) (So4)3 18H2O | 1 | Kg |
| 05-12-00181 | CuSo4.5H2O | 1 | Kg |
| 05-12-00182 | Mn So4.4H2O | 1 | Kg |
| 05-12-00183 | (NH4)6 Mo7O24.4H2O | 1 | Kg |
| 05-12-00184 | Zn So4.7H2O | 1 | Kg |
| 05-12-00185 | Ca (NO3)2 | 1 | Kg |

| | | | |
|-------------|---|-----|---------|
| 05-12-00186 | NH4H2Po4 | 1 | Kg |
| 05-12-00187 | KNo3 | 1 | Kg |
| 05-12-00188 | Mn Cl2.4H2O | 1 | Kg |
| 05-12-00189 | H2MoO4H2O | 1 | Kg |
| 05-12-00190 | Ethylendiamine tetra acetic acid (EDTA) sodium salt | 2 | Kg |
| 05-12-00191 | Caboxy methyl cellulose | 1 | Kg |
| 05-12-00192 | Benomyl (benlate so) | 100 | Kg |
| 05-12-00193 | Formaline 40% | 500 | L |
| 05-12-00194 | Calicume hypochloride | 50 | Kg |
| | 3- Cultivars | | |
| 05-12-00195 | High yields and local environment condition tolerant <i>Agaricus bisporus</i> (5-10) variety | - | gm |
| 05-12-00196 | High yields and local environment condition tolerant <i>pleurotus sajor-cajo</i> (5-10) variety | - | gm |
| 05-12-00197 | High yields and local environment condition tolerant <i>pleurotus ostreatus</i> (5-10) variety | - | gm |
| 05-12-00198 | <i>Lentinus edodes</i> (shittake) (5-10) variety | - | gm |
| 05-12-00199 | <i>Ganoderma lucidum</i> (5-10) variety | - | gm |
| 05-12-00200 | <i>Grifola frondosa</i> (5-10) variety | - | gm |
| 05-12-00201 | <i>Coriolus versicolor</i> (5-10) variety | - | gm |
| 05-12-00202 | Other if possible | - | gm |
| | 4- Tools | | |
| 05-12-00203 | Atomizer | 3 | Pcs |
| 05-12-00204 | Bell jar | 3 | Pcs |
| 05-12-00205 | Blotter(BI) paper | 5 | Pcs |
| 05-12-00206 | Burner(Bu) | 3 | Pcs |
| 05-12-00207 | Camera lucida | 1 | Pcs |
| 05-12-00208 | Cavity slides | 5 | Pcs |
| 05-12-00209 | Cork borer | 1 | Set |
| 05-12-00210 | Cotton-absorbent and non absorbent | 10 | Kg |
| 05-12-00211 | Cover-slips (Cs) | 5 | Boxes |
| 05-12-00212 | Desiccator | 2 | Pcs |
| 05-12-00213 | Dropping bottle | 5 | Pcs |
| 05-12-00214 | Filter paper (black and white) | 10 | Packets |
| 05-12-00215 | Forceps (f) | 3 | Pcs |
| 05-12-00216 | Glass slides | 5 | Boxes |
| 05-12-00217 | Haemocytometer | 2 | Pcs |
| 05-12-00218 | Hand lens | 2 | Pcs |
| 05-12-00219 | Inoculating needle (In) | 3 | Pcs |
| 05-12-00220 | Iron kinfe (Ik) | 2 | Pcs |
| 05-12-00221 | Labels | 10 | Pcs |
| 05-12-00222 | Magnifying glass | 3 | Pcs |
| 05-12-00223 | Metal cylinder | 10 | Pcs |
| 05-12-00224 | Needles (N) | 5 | Pcs |
| 05-12-00225 | Plant press | 2 | Pcs |
| 05-12-00226 | Rack | 4 | Pcs |
| 05-12-00227 | Scalped (Sc) | 2 | Pcs |

| Complimentary | Optimal Application Date | Optimal Delivery Date | Target Beneficiari |
|------------------------|---------------------------------|------------------------------|---------------------------|
| Fertilizer 05-12-00013 | Dec. 2000 | Nov. 2000 | 3000 |
| | Jun-00 | May-00 | 2000 |
| | Jun-00 | May-00 | 1200 |
| | Mar-00 | Feb. 2000 | 1000 |
| | Mar-00 | Feb. 2000 | 937.5 |
| | Mar-00 | Feb. 2000 | 1250 |
| | Jul. 2000 | Jun-00 | 750 |
| | Mar-00 | Feb. 2000 | 1000 |
| | Mar-00 | Feb. 2000 | 87 |
| | Mar-00 | Feb. 2000 | 1070 |
| | Jul-00 | Jun-00 | 750 |
| | Dec. 2000 | Nov. 2000 | 1250 |

| Complimentary items | Optimal Application Date | Optimal Delivery Date | Target Beneficiaries Area (Ha) |
|---|--------------------------|-----------------------|--------------------------------|
| Fertilizer 05-12-0001 Seeds 05-12-00001-00012 | Oct. 2000 | Sep. 2000 | 22063 |
| | Oct. 2000 | Sep. 2000 | 22063 |
| | Oct. 2000 | Sep. 2000 | 22063 |
| | Oct. 2000 | Sep. 2000 | 22063 |
| | Oct. 2000 | Sep. 2000 | 22063 |
| | Oct. 2000 | Sep. 2000 | 22063 |
| | Oct. 2000 | Sep. 2000 | 22063 |
| | Oct. 2000 | Sep. 2000 | 22063 |

