

QUESTIONS AND ANSWERS REPORT

<u>To:</u>	Bidders
<u>From:</u>	UNDP Lebanon
<u>Subject:</u>	Procurement of Apple Sorting line and Potato/Onions sorting line equipment for the Kefraya Agricultural Service Center
<u>Reference:</u>	LEB/CO ITB/118/16
<u>Date:</u>	13 June 2016

UNDP Lebanon Procurement Unit has received several questions regarding the subject Tendering Procedure. All questions received to-date are documented below with respective answers.

Questions and Answers		
1	Q.	The technical specs state 'Capacity Min 6 MT per hour, Max 8MT per hour'. What is meant by 'MT' or is this just supposed to read 6 to 8 tonnes per hour?
	A.	MT is Metric Ton.
2	Q.	As written in the document I received, you ask for an Apple line for 4-6 Tons/hour. Later you suggest or request to have 4 Lanes with speed 450-700 cups/minute (575 average). The feeding should be up to 80%. If we use 200gr as the average weight of an apple, the calculation is: (200 gr) X (575 cups/min) X (60 min) X (80 %) / (1000000 gr) X (4 Lanes) = (5,520 Tons/hour) X (4 Lanes) = (22,08 Tons/hour) As you can read something went wrong. Please, could we clarify what tonnes per hour is needed
	A.	The capacity of the apple sorting is beyond arithmetic. It's about efficiency, compromise and human factor. The capacity required is 6 to 8 MT per hour. The apple sorting machine designer take the 8 MT as capacity because will be easy then. The average apple fruit weight is dependent on the variety, tree age, soil and irrigation, climate, fruit thinning among other factors. The average apple fruit average of a tree is 70 to 100 grams. We believe that the apple size in Lebanon is to the lower side because

		<p>fruit thinning is seldom adopted. The designer takes the average of this range = 85 grams. So according to the correct calculations the formula now is as follows:</p> <p>$(85 \text{ gr}) \times (575 \text{ cups/min}) \times (60 \text{ min}) \times (80 \%) / (1000 \text{ gr/kg}) \times (4 \text{ Lanes}) = (5,520 \text{ Tons/hour}) \times (4 \text{ Lanes}) = 9,384 \text{ MT per hour.}$</p> <p>The efficiency of workers is around 85 % and then 8 MT per hour is reached.</p>
3	Q.	If the capacity result with a manufacturer's size that has 4 lanes is around 16 Tons/hour and the correct value requested is 4-6 Tons/hour, would it be acceptable to offer 2 lanes instead of 4 considering that the capacity would match what is required?
	A.	Answered above.
4	Q.	The manufacturer has requested the sizes of the room where the machine will be placed in order to design a possible layout
	A.	Rooms are big enough to take any standard line + the dimensions of line components are found in the tender docs.
5	Q.	The Apple line and the Onion/Potatoes line will be together in the same area? Please explain.
	A.	They might be. It is about the premises and the layout. Bidders have to stick to the dimensions found in the tender.
6	Q.	I would like to know the size of the input crates (box with fruit).
	A.	Length 55cmx Width 36cmx Depth 28 cm.
7	Q.	I figure that you need a special unit to unload fruit into the water by small boxes, is this true?
	A.	Yes
8	Q.	number of exit for packing bench: _____
	A.	8 exit benches
9	Q.	Can you please define the capacity required in tons/hour capacity? The range specified is too large "Capacity Min 6 MT per hour for smaller weight per piece, Max 16 MT per hour for larger weight per piece."
	A.	Yes it is too large due to the size of potato and onion crop in Lebanon, the smaller the size, the smaller the capacity.
10	Q.	Is there any cleaning required? If yes, Washing or Dry-cleaning with brushes?
	A.	Yes, Washing

11	Q.	Please detail the sorting by size required for potatoes, in how many sizes?
	A.	Sorting by weight
12	Q.	Note that potatoes and onions are usually sorted by diameter with mechanical sorters. Electronic sorters can be used but they will have to be washed and dried first.
	A.	Yes
13	Q.	What type of packaging is required? Bags 10 - 50 kg?
	A.	10 to 25 kg bags and cardboard boxes.
14	Q.	Can I just double check something. In the clarifications issued you now state that there are 8 exit benches but in the technical requirements there are 12 conveyor belts and 12 outlets for calibrated fruits. Please advise if the original 12 has been changed to 8.
	A.	No. the technical requirements are still the same as per the ToR.
15	Q.	In the scope of works concerning the Potato/Onions sorting line, no technical specs are available for the grader and washing unit!! Specs are available only for the receiving part!
	A.	<p>Below are the specifications as per the attached Update Scope of Works :</p> <div style="border: 1px solid black; padding: 10px;"> <p>Mild Steel Barrel Washer</p> <ul style="list-style-type: none"> • Rubber lined infeed chute • Stainless steel perforated sheet barrel drum, 2.8 3.2 m long x 1100 1300 mm diameter • Water holding tank with flat floor • Overflow pipe to control water level • Large cleaning out access door to side of the machine • 100 mm diameter drain valve • Washing barrel supported on rubber belts and powered by a variable speed drive motor • Manually adjustable product outfeed door to control flow of crop • Stainless steel outfeed elevator with self-draining rubber door stop belt • Fresh water final rinse spray bar fitted above belt <p>Sponge Dryer</p> <ul style="list-style-type: none"> • 800 - 1000mm wide, 8 - 12 rollers long • Donut style sponge rings suitable for handling potatoes • Zinc plated squeeze rollers </div>

		<ul style="list-style-type: none"> • Fixed speed drive motor with soft start • Drip tray to move water to side of machine • Adjustable height support legs • Fork lift tines • Manufactured in mild steel with stainless steel produce contact points 	
		<p>Screen Sizing Module</p> <ul style="list-style-type: none"> • Triple screen unit mounted on one chassis • 3 off 1.5 – 1.7 m long x 1100 -1300 mm wide • 3 x dual pintle roller drives • 3 x variable speed screen motor • 3 x variable speed agitator motor • Long tuber handling devices • 2 x Pintle transfer roller • End baffle chute to box • Forklift tubes • 3 x 850 – 950 mm wide conveyors, slideable and reversible • Adjustable height legs 	