

4. B. PROCESSING – FIELD CROPS



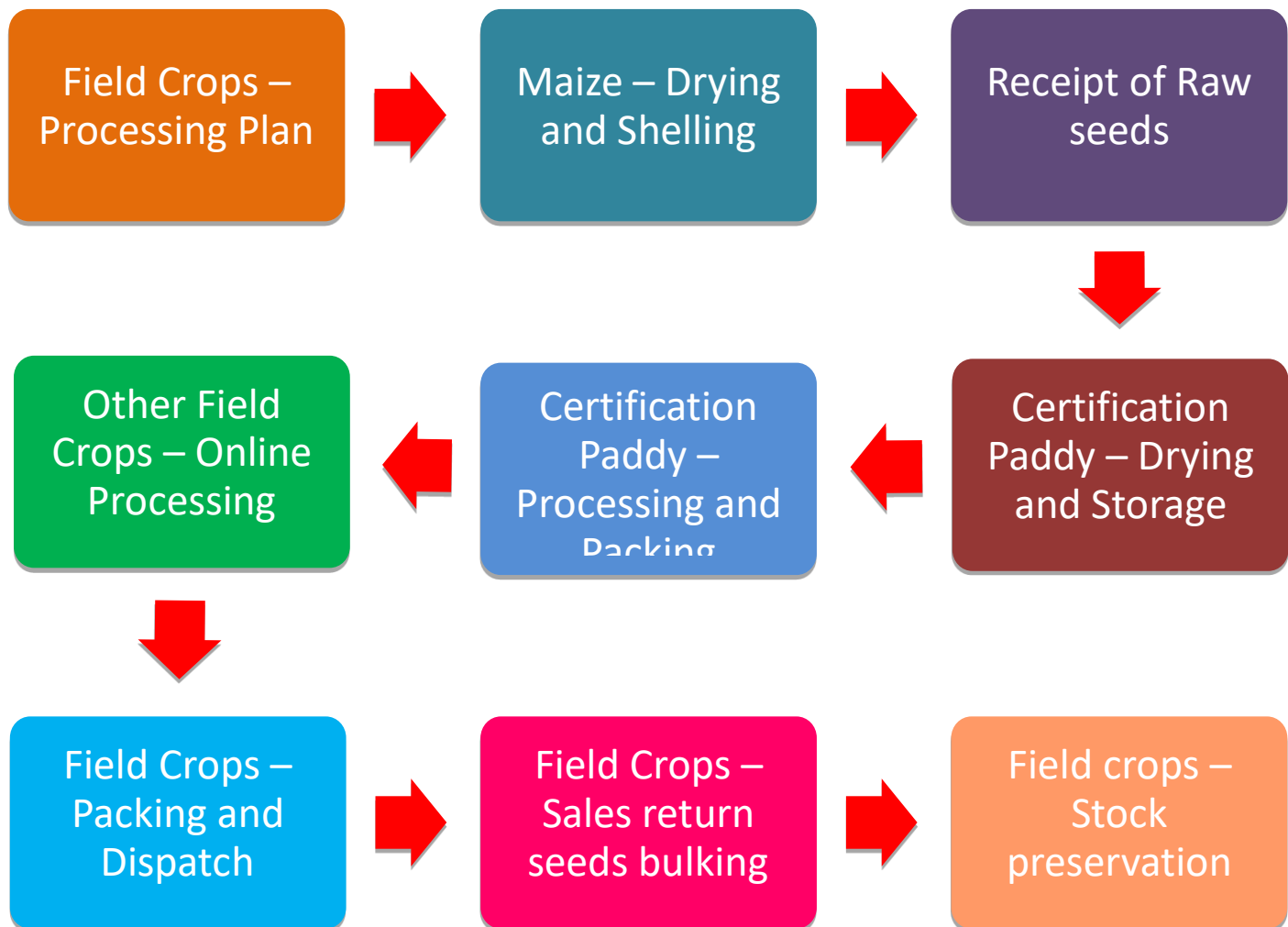
4.B PROCESSING – FIELD CROP

PROCESS SUMMARY

Objective:

- Processing of quality hybrid seeds based on the packing requirement
- Timely supply of required quantity with quality seed for hybrid seed sales

Process Overview:



Process beginning:

- Receipt of placement plan from marketing and raw seed arrival plan from production

Process ending:

- Supply of packed commercial seeds for dispatch

Key Inputs

Particulars	From	Document Reference
Placement plan	Sales & Marketing	S&M/COM/024
Raw seed arrival plan	Hybrid production	PRC/COT/025
Wet cobs/Raw seeds	Hybrid production	-
Shelled seeds	Drying unit	-
Packing materials	Stores	-
Treatment chemicals	Stores	-

Key Outputs

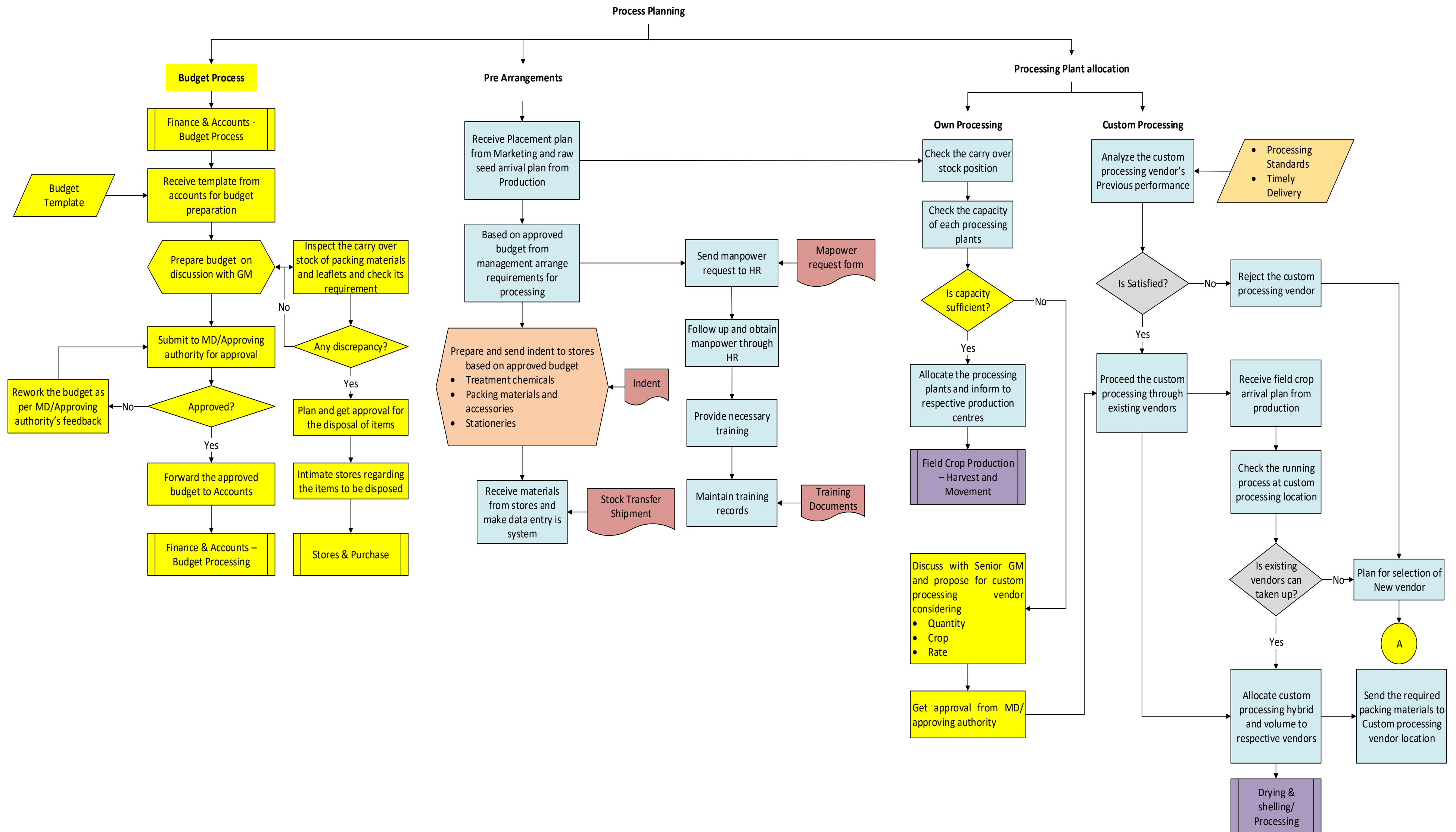
Particulars	To	Document Reference
Packed hybrid seeds	C & F/Distributors	-

Key Documents / Register / Files

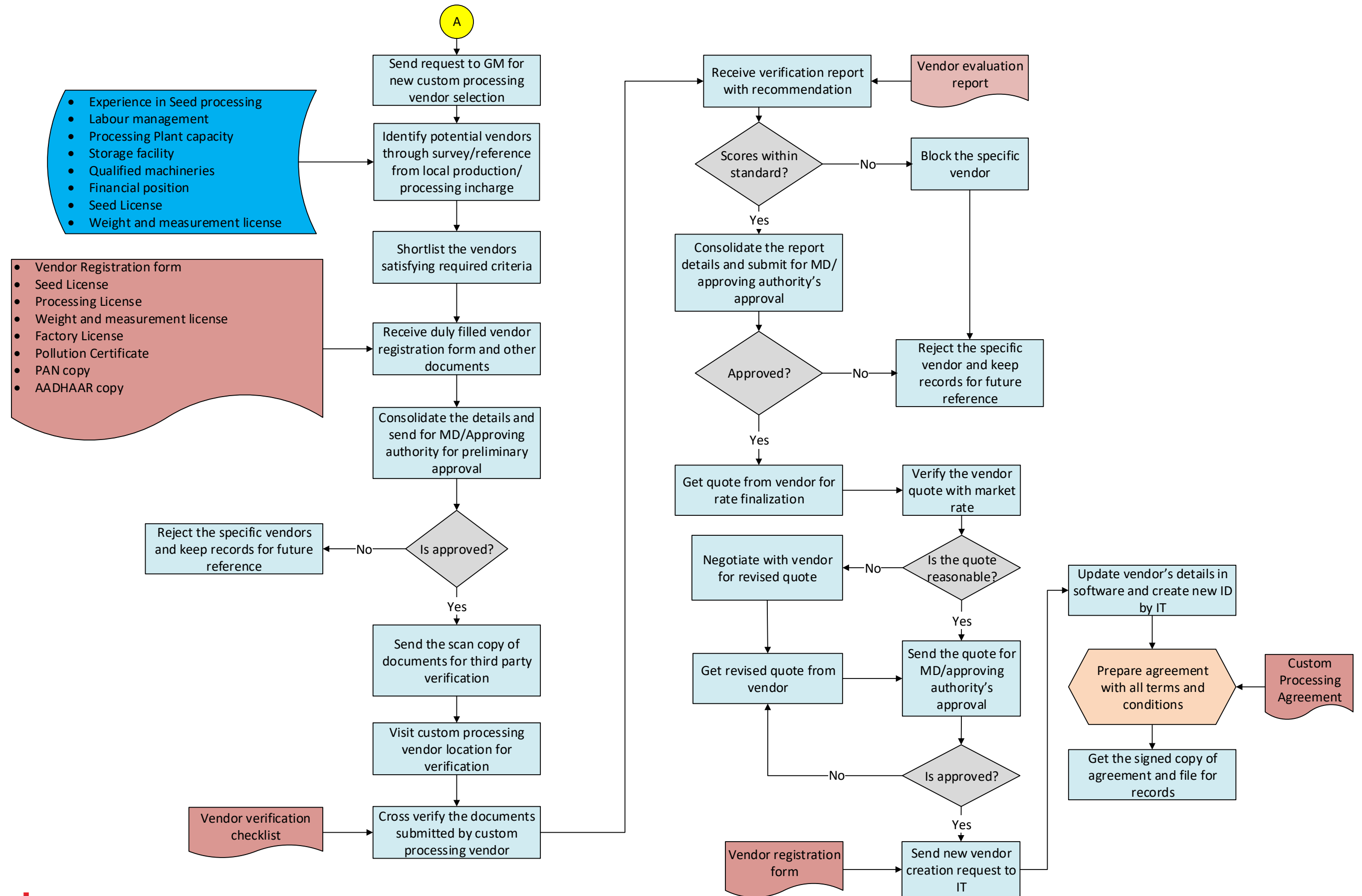
S no	Document / Register Name	Document Format	Document Reference
1	Check weighment book	Pre-printed form	PRC/FCD/001
2	Cold storage agreement	Pre-printed form	PRC/FCD/002
3	Custom processing agreement - Field Crops	Pre-printed form	PRC/FCD/003
4	Dryer Note – Air Position	Manual Register	PRC/FCD/004
5	Drying entry report	Manual Register	PRC/FCD/006
6	Drying register	Manual Register	PRC/FCD/007
7	Gasifier / LPG record	Manual Register	PRC/FCD/008
8	Loading sheet	Pre-printed form	PRC/FCD/010
9	Online dryer details book	Manual Register	PRC/FCD/011
10	Online processing report - Field Crops	Pre-printed form	PRC/FCD/012

S no	Document / Register Name	Document Format	Document Reference
11	Packing Report	Software form	PRC/FCD/013
12	PR Report	Pre-printed form	PRC/FCD/014
13	Shelling register	Manual Register	PRC/FCD/016
14	Stack card	Pre-printed form	PRC/FCD/017
15	Unloading sheet	Pre-printed form	PRC/FCD/018
16	Paddy Movement Advice	Pre-printed form	PDN/FCD/045
17	GC transfer list	Software form	QAS/COM/009
18	Qc transfer advice	Software form	QAS/COM/024
19	Bill of Supply	Software form	GEN/COM/024
20	Blower reading	Manual Register	GEN/COM/041
21	Cob drying details book	Pre-printed form	GEN/COM/042
22	Kapas/FR seed receipt	Software form	GEN/COM/010
23	Indent	Excel - Mail	GEN/COM/008
24	Inward register	Manual Register	GEN/COM/043
25	Material inward advice	Pre-printed form	GEN/COM/011
26	Seed Dispatch Note for Field Run Seed	Pre-printed form	GEN/COM/020
27	Spraying and Fumigation Register	Manual Register	GEN/COM/022
28	Stock Transfer Shipment	Software form	GEN/COM/009
29	Vendor advance payment request	Excel	GEN/COM/025
30	Vendor evaluation report	Word	GEN/COM/026
31	Vendor registration form	Word	GEN/COM/027
32	Vendor verification checklist	Excel	GEN/COM/028
33	Manpower request form	Pre-printed form	HRM/COM/002
34	Custom Processing - Bill of supply	External document	-
35	Lorry receipt	External document	-
36	LR copy	External document	-

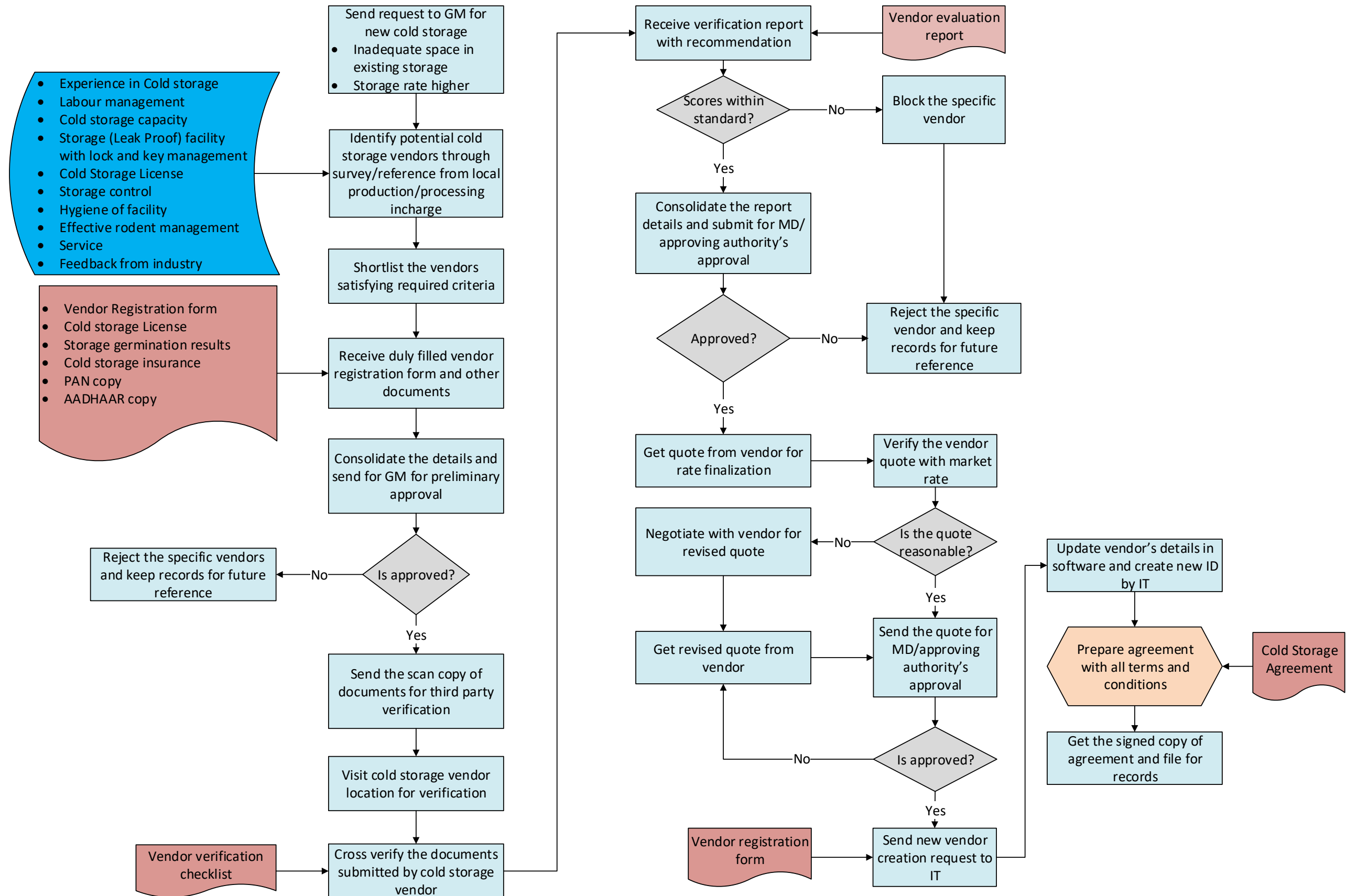
4. B.1 FIELD CROP – PROCESSING PLAN



New custom processing vendor selection process



New Cold storage vendor selection process



Sub-process Owner:

Head - FC

Departments Involved:

Sales & Marketing

Production

Stores

HR

IT

Key activities:

4. B.1.1 Budget Process

4. B.1.2 Pre arrangements

4. B.1.3 Processing plant allocation

4. B.1.4 New custom processing vendor selection

4. B.1.5 New cold storage vendor selection

Process	Maker	Checker	Approver
4. B.1.1 Budget Process			
1) Receive template from accounts for budget preparation	Head – FC		
Carry over packing materials inspection			
2) Inspect the carry over stock of packing materials and leaflets and check its requirement	Manager - Processing	Head – FC	
3) In case of any discrepancy as below then plan for disposal of same <ul style="list-style-type: none"> Change of label as per Government norms Design Change Hybrid obsolete etc. 	Manager - Processing	Head – FC	
4) Submit the details to Senior GM for authorization for disposal	Head – FC	Senior GM - MFG	Senior GM – MFG
5) Inform stores department regarding the items to be disposed based on above factors	Head – FC	Senior GM - MFG	
6) In case of no discrepancy in the carry over stock of packing materials then keep it for current year operations	Manager - Processing	Head – FC	
7) Prepare preliminary budget on discussion with GM for processing department	Head – FC	Senior GM - MFG	
8) Submit the budget to MD/Approving authority's approval	Head – FC	Senior GM - MFG	MD/Approving authority
9) If any rework to be done then make changes in the budget as per the feedback/input given by Md/approving authority	Head – FC	Senior GM - MFG	MD/Approving authority
10) If the budget is approved then forward the approved budget to accounts and keep in records for budget vs actual tracking	Head – FC	Senior GM - MFG	
4. B.1.2 Pre arrangements			

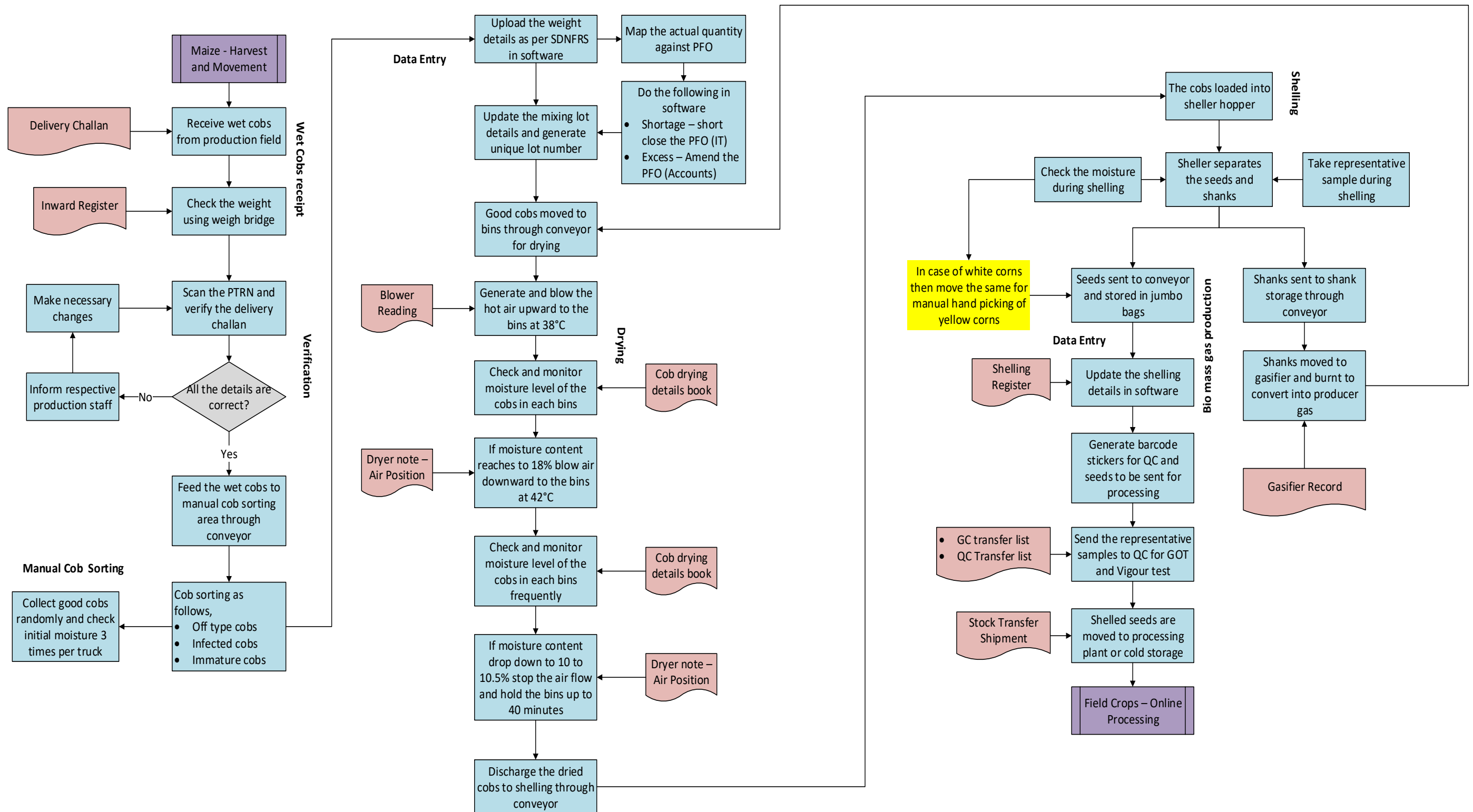
Process	Maker	Checker	Approver
1) Receive placement plan from marketing and raw seed arrival plan from production	Manager Processing	Head – FC/Senior GM - MFG	
2) Based on the budget approved by the management arrange manpower requirement for processing	Manager Processing	Head – FC/Senior GM - MFG	
3) Follow up and obtain manpower through HR and give necessary training	Manager Processing	Head – FC/Senior GM - MFG	
4) Prepare indent as given below and send to stores based on approved budget <ul style="list-style-type: none"> Treatment chemicals Packing materials and accessories Stationeries 	Manager Processing	Head – FC/Senior GM - MFG	
5) Receive the materials from stores and make data entry in the system for stock transfer shipment	Data entry operator	Manager Processing	
4. B.1.3 Processing plant allocation			
Own Processing			
1) Check the carry over stock position and capacity of each processing plants for quantity allocation based on placement plan and raw seeds arrival plan	Manager Processing	Head – FC	
2) In case if the capacity is insufficient then discuss with Senior GM and propose for custom processing vendor considering the below, <ul style="list-style-type: none"> Quantity Crop Rate 	Head – FC	Senior GM – MFG	
3) Submit the proposal to MD/Approving authority for approval	Head – FC	Senior GM – MFG	MD/Approving authority
4) After approval proceed with the quantity/crop allocation to respective custom processing vendor	Manager Processing	Head – FC/Senior GM - MFG	
5) In case the capacity of own processing plants then based on the capacity allocate the processing plants and inform to respective production centers	Manager Processing	Head – FC/Senior GM - MFG	
Custom Processing			
1) Analyze the custom processing Vendor's based on the previous performance <ul style="list-style-type: none"> Processing standards Timely Delivery 	Manager Processing	Head – FC	
2) In case the vendor did not come across the specific standard, reject the particular custom processing vendor and plan for selection of new vendor	Manager Processing	Head – FC/Senior GM - MFG	

Process	Maker	Checker	Approver
3) If the existing custom processing vendor's performance is within the standards then check the running process in their location	Manager Processing	Head – FC/Senior GM - MFG	
4) If the existing vendors not able to take up then plan for selection of new vendor	Manager Processing	Head – FC/Senior GM - MFG	
5) If the existing vendors can able to take up the custom processing then allocate the crop and volume to respective vendors	Manager Processing	Head – FC/Senior GM - MFG	
6) Send the required packing materials to respective custom processing vendor locations	Manager Processing	Head – FC	
4. B.1.4 New custom processing vendor selection			
1) Send request through GM for selection of new customer processing vendor and get approval from MD/approving authority	Head – FC	Senior GM - MFG	MD/Approving authority
2) Identify potential vendor through survey/ reference from local production processing in charge based on <ul style="list-style-type: none"> •Experience in seed processing •Labour Management •Processing plant capacity •Storage facility •Qualified machineries •Financial position •Seed processing License •Weight and measurement license 	Manager Processing	Head – FC/Senior GM - MFG	
3) Shortlist the potential vendors who satisfy the required criteria	Manager Processing	Head – FC/Senior GM - MFG	
4) Receive the duly filled vendor registration form and other documents <ul style="list-style-type: none"> •Vendor registration form •Seed processing license •Weight and measurement license •Factory License •Pollution certificate •PAN copy •AADHAAR copy •Bank pass book copy 	Manager Processing	Head – FC/Senior GM - MFG	
5) Consolidate the details and sent to MD/Approving authority for preliminary approval and send the scan copy documents for third party verification (for long term process and for short term the third- party verification not required)	Head - FC	Senior GM - MFG	MD/Approving Authority/ Approving authority
6) In case of no approval reject the specific vendors and keep records for future reference	Head - FC	Senior GM - MFG	

Process	Maker	Checker	Approver
7) Visit custom processing vendor location and cross verify the documents submitted by custom processing vendor	Third party	Manager - Processing	
8) Receive vendor evaluation report with recommendation and check whether the scores are within the standards	Manager - Processing	Senior GM - MFG	
9) In case the scores do not match with the standards then reject the vendor and maintain records for future reference	Manager - Processing	Senior GM - MFG	
10) Consolidate the report details and submit for MD approval	Manager - Processing	Senior GM - MFG	MD/Approving Authority
11) In case of no approval reject the specific vendor and keep records for future reference	Manager - Processing	Senior GM - MFG	
12) Receive quote from vendor for rate finalization	Manager - Processing	Senior GM - MFG	
13) Verify the vendor quote with market rate and check if the rate is reasonable	Manager - Processing	Senior GM - MFG	
14) In case the rate is not reasonable, negotiate the vendor for revised quote	Manager - Processing	Senior GM - MFG	
15) Send the quote for MD/Approving authority's approval and prepare custom processing agreement with all the terms and conditions	Manager - Processing	Senior GM - MFG	MD/Approving Authority
16) Send new vendor creation request to IT	Manager - Processing	Senior GM - MFG	
17) Update vendors details in software and create new ID	IT Executive	Manager - Processing	
18) Receive the signed copy of the agreement and file for records	Manager - Processing	Senior GM - MFG	
4. B.1.5 New Cold storage vendor selection			
1) Send request to GM for selection of new Cold storage vendor	Manager - Processing	Senior GM - MFG	
2) Identify potential vendor through survey/ reference from local production processing in charge based on <ul style="list-style-type: none"> • Experience in Cold storage • Labour Management • Cold Storage capacity • Storage (Leak Proof) facility with lock and key management • Cold storage license • Storage control • Hygiene of facility • Effective rodent management • Service • Feedback from industry 	Manager - Processing	Senior GM - MFG	
3) Shortlist the vendors who satisfy the required criteria	Manager - Processing	Senior GM - MFG	

Process	Maker	Checker	Approver
4) Receive the duly filled vendor registration form and other documents <ul style="list-style-type: none"> • Vendor registration form • Cold Storage license • Storage germination results • Cold storage insurance • PAN copy • AADHAAR copy 	Manager - Processing	Senior GM - MFG	
5) Consolidate the details and sent to GM for preliminary approval and send the scan copy documents for third party verification	Manager - Processing	Senior GM - MFG	
6) In case of no approval reject the specific vendors and keep records for future reference	Manager - Processing	Senior GM - MFG	
7) Visit custom processing vendor location and cross verify the documents submitted by custom processing vendor	Third Party	Manager - Processing	
8) Receive vendor evaluation report with recommendation and check whether the scores are within the standards	Manager - Processing	Senior GM - MFG	
9) In case the scores do not match with the standards then reject the vendor and maintain records for future reference	Manager - Processing	Senior GM - MFG	
10) Consolidate the report details and submit for MD/Approving authority's approval	Manager - Processing	Senior GM - MFG	MD/Approving Authority
11) In case of no approval reject the specific vendor and keep records for future reference	Manager - Processing	Senior GM - MFG	
12) Receive quote from approved vendor for rate finalization	Manager - Processing	Senior GM - MFG	
13) Verify the vendor quote with market rate and check if the rate is reasonable	Manager - Processing	Senior GM - MFG	
14) In case the rate is not reasonable, negotiate the vendor for revised quote	Manager - Processing	Senior GM - MFG	
15) Send the quote for MD/Approving authority's approval and prepare custom processing agreement with all the terms and conditions	Manager - Processing	Senior GM - MFG	MD/Approving Authority
16) Send new vendor creation request to IT department	Manager - Processing	Senior GM - MFG	
17) Update vendors details in software to create new ID	IT - Executive	Manager - Processing	
18) Receive the signed copy of the agreement and file for records	Manager - Processing	Senior GM - MFG	

4. B.2 DRYING AND SHELLING – MAIZE



Sub-process Owner:

Manager - Processing

Departments Involved:

Production

Processing

QC

Key activities:

4. B.2.1 Wet cobs receipt

4. B.2.2 Drying

4. B.2.3 Shelling

Process	Maker	Checker	Approver
4. B.2.1 Wet Cobs Receipt			
1) Receive wet cobs from production field through Delivery challan	Unit Supervisor	Assistant Manager/Plant Supervisor	
2) Check the weight using weigh bridge and update the inward register <ul style="list-style-type: none"> •Date •Truck number •Grower code •Variety •Lot no •Qty in Kg •Cumulative qty •Load weight in Kg •Empty weight in Kg •Net weight •Variation •Moisture 	Unit Supervisor	Assistant Manager/Plant Supervisor	
3) Scan the PTRN sticker and verify the delivery challan to ensure all the details are correct	Unit Supervisor	Assistant Manager/Plant Supervisor	
4) In case of deviation inform the respective production staff and make necessary changes	Unit Supervisor	Assistant Manager/Plant Supervisor	
5) Feed the wet cobs to manual cob sorting area through conveyor and sort the following,	Unit Supervisor	Assistant Manager/Plant Supervisor	

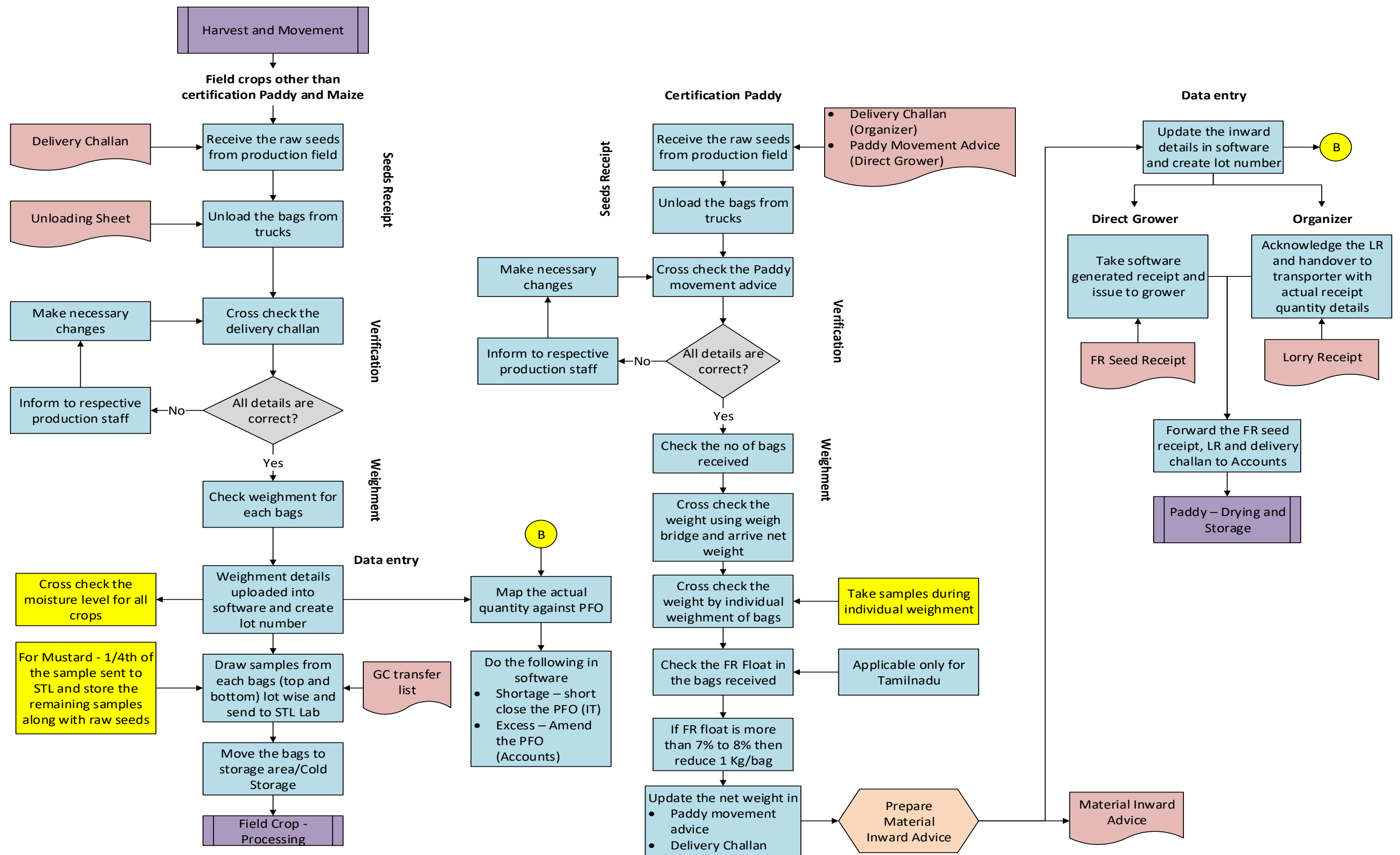
Process	Maker	Checker	Approver
<ul style="list-style-type: none"> • Off type cobs • Infected cobs • Immature cobs 		ant Supervisor	
6) Collect the good cobs randomly and check initial moisture 3 times per truck and send for drying through conveyor <ul style="list-style-type: none"> • Sample No • Sampling date • Sampling time • Moisture • Difference in moisture • Running time • In feeding temperature 	Unit Supervisor	Assistant Manager/Plant Supervisor	
7) Upload the weight details in software as per Delivery challan	Data entry operator	Unit supervisor	
8) Map the actual quantity against PFO and do the following in software <ul style="list-style-type: none"> • Shortage – Short close the PFO (IT) • Excess – Amend the PFO (Accounts) 	Data entry operator	Unit supervisor	
9) Update the mixing lot details and generate unique lot number	Data entry operator	Unit supervisor	
10) Ensure good cobs moved to bins through conveyor	Unit Supervisor	Assistant Manager/Plant Supervisor	
4. B.2.2 Drying			
11) Generate and blow the hot air upwards to the bins at 38°C and note the readings in blower reading <ul style="list-style-type: none"> • Time • Gasifier/LPG • RPM • Frequency • Input current • Output current • Voltage • Unit kwh • Temperature • Water Column – Up/Low 	Plant Operators	Unit Supervisor/ Assistant Manager/Plant Supervisor	
12) Check and monitor the moisture level of the cobs in each bins and update in cob drying details book	Plant Operators	Unit Supervisor/ Assistant	

Process	Maker	Checker	Approver
		Manager/Plant Supervisor	
13) If moisture content reaches to 18% blow air downward to the bins at 42°C	Plant Operators	Unit Supervisor/ Assistant Manager/Plant Supervisor	
14) Check and monitor the moisture level of the cob in each bin frequently and update in cob drying details book	Plant Operators	Unit Supervisor/ Assistant Manager/Plant Supervisor	
15) If the moisture content drops down from 10% to 10.5% then stop the air flow and hold the bins up to 40 minutes	Plant Operators	Unit Supervisor/ Assistant Manager/Plant Supervisor	
4. B.2.3 Shelling			
1) Load the cobs into sheller hopper	Plant Operators	Unit Supervisor/ Assistant Manager/Plant Supervisor	
2) Check moisture level during shelling and take representative sample	Plant Operators	Unit Supervisor/ Assistant Manager/Plant Supervisor	
3) Ensure sheller separates the seeds and shanks and are stored separately	Plant Operators	Unit Supervisor/ Assistant Manager/Plant Supervisor	
4) Ensure seeds are sent to conveyor and stored in jumbo bags	Plant Operators	Unit Supervisor/ Assistant Manager/Plant Supervisor	

Process	Maker	Checker	Approver
5) In case for white corns hand pick the yellow seeds	Plant Operators	Unit Supervisor/ Assistant Manager/ Plant Supervisor	
6) Handpicked yellow seeds to be treated as rejected and can be stored for secondary sales	Plant Operators	Unit Supervisor/ Assistant Manager/ Plant Supervisor	
7) Update the shelling details in software <ul style="list-style-type: none"> • Date • Shift • Bin No • Variety • Moisture • Lot No • Wet Cob DC Qty • Wet Cob AC Qty • Shelled seed Qty • Seed Recovery • No of Bags • Sample sent date 	Data entry operator	Unit Supervisor/ Assistant Manager/ Plant Supervisor	
8) Generate barcode stickers for QC samples and for seeds to be sent to processing plants	Data entry operator	Unit Supervisor/ Assistant Manager/ Plant Supervisor	
9) Send the representative samples to QC for germination and vigour test	Unit Supervisor	Assistant Manager/ Plant Supervisor	
10) Move the seeds to processing plant or cold storage through stock transfer shipment	Unit Supervisor	Assistant Manager/ Plant Supervisor	
11) Send shanks to shank storage through conveyor	Unit Supervisor	Assistant Manager/ Plant Supervisor	

Process	Maker	Checker	Approver
12) Burn the shanks in gasifier to convert them to producer gas and update the details in gasifier record <ul style="list-style-type: none"> • Date • Shift • Starting time • Stop time • Running hours • Output temperature • Stopped reason • Operator name 	Unit Supervisor	Assistant Manager/Plant Supervisor	

4. B.3 RECEIPT OF RAW SEEDS



Sub-process Owner:

Processing Manager

Departments Involved:

Production

Processing

QC

Key activities:

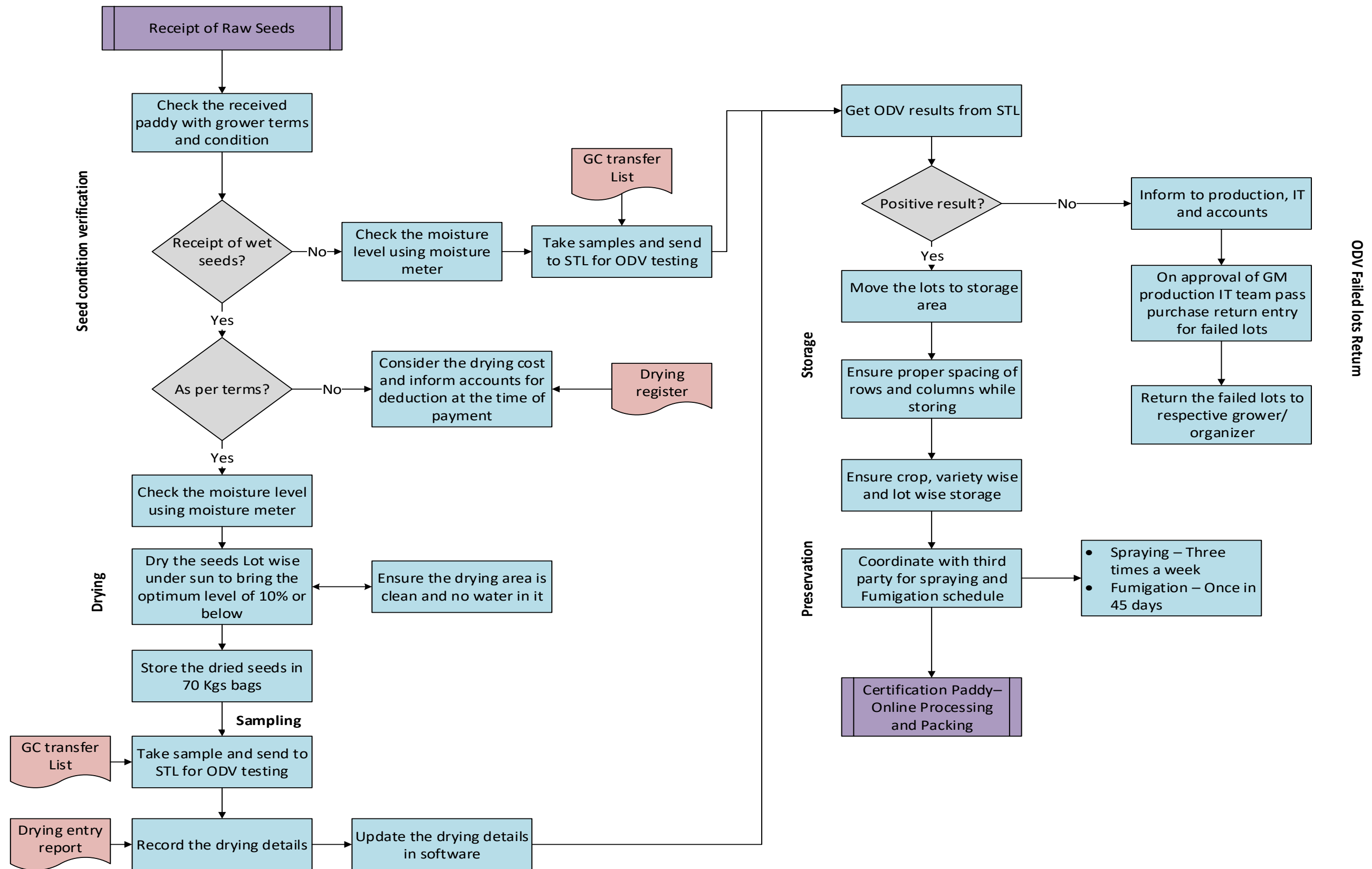
4. B.3.1 Receipt of raw seeds other than certification paddy

4. B.3.2 Receipt of raw seeds – certification paddy

Process	Maker	Checker	Approver
4. B.3.1 Field crop other than certification paddy			
1) Receive the raw seeds other than paddy and maize from field	Plant Supervisor	Manager - Processing	
2) Unload the bags from trucks and update the unloading sheet	Labours	Assistant Manager/Plant Supervisor	
3) Check all the details in delivery challan are correct	Plant Supervisor	Manager - Processing	
4) In case of deviation in delivery challan then inform to respective production staff and make necessary changes	Plant Supervisor	Manager - Processing	
5) If all details are correct then check weighment for each bags	Plant Supervisor	Manager - Processing	
6) Cross check the moisture level for all crops	Plant Supervisor	Manager - Processing	
7) Data entry the weighment details in the software and create lot number	Data entry operator	Manager - Processing	
8) Map the actual quantity against PFO and update the following in software <ul style="list-style-type: none"> • Shortage – Short close the PFO (IT) • Excess – Amend the PFO (Accounts) 	Data entry operator	Manager - Processing	
9) Draw samples from each bag in lot wise (Top to bottom) and send the samples to STL lab	Plant Supervisor	Manager - Processing	
10) For Mustard - 1/4th of the sample to be sent to STL and store the remaining samples along with raw seeds	Plant Supervisor	Manager - Processing	
11) Move the bags to storage area	Labours	Plant Supervisor	
4. B.3.2 Receipt of Raw seeds - Certification paddy			
1) Receive the raw seeds from production field through, <ul style="list-style-type: none"> • Seeds dispatch note for field run seed (organizer) • Paddy movement advice (Direct grower) 	Plant Supervisor	Manager - Processing	

Process	Maker	Checker	Approver
2) Unload the bags from trucks and verify the paddy movement advice	Labours	Plant Supervisor	
3) In case of deviation in the paddy movement advice inform the respective production, staff and make necessary changes	Plant Supervisor	Manager - Processing	
4) Check the number of bags received and check the weight using weigh bridge and arrive net weight	Plant Supervisor	Manager - Processing	
5) Cross check the weight by individual weighment of bags	Plant Supervisor	Manager - Processing	
6) Take samples during individual weighment	Plant Supervisor	Manager - Processing	
7) Check the FR float (applicable only for Tamil Nadu) in the bags received	Plant Supervisor	Manager - Processing	
8) If FR float is more than 7 % to 8% then reduce 1 kg per bag and update the net weight in <ul style="list-style-type: none"> •Paddy movement advice •Delivery Challan 	Plant Supervisor	Manager - Processing	
9) Prepare the Material inward advice and data entry the inward details in software and create lot number	Data entry operator	Plant Supervisor	
10) In case of direct grower take the software generated FR seed receipt and issue to the grower	Data entry operator	Plant Supervisor	
11) In case of organizer, acknowledge the Lorry Receipt and handover to transporter with actual receipt quantity details	Plant Supervisor	Manager - Processing	
12) Forward the FR seed receipt, lorry receipt and delivery challan to accounts	Plant Supervisor	Manager - Processing	

4. B.4 CERTIFICATION PADDY – DRYING AND STORAGE



Sub-process Owner:

Processing Manager

Departments Involved:

Processing

QC

Accounts

IT

Key activities:

4. B.4.1 Verification

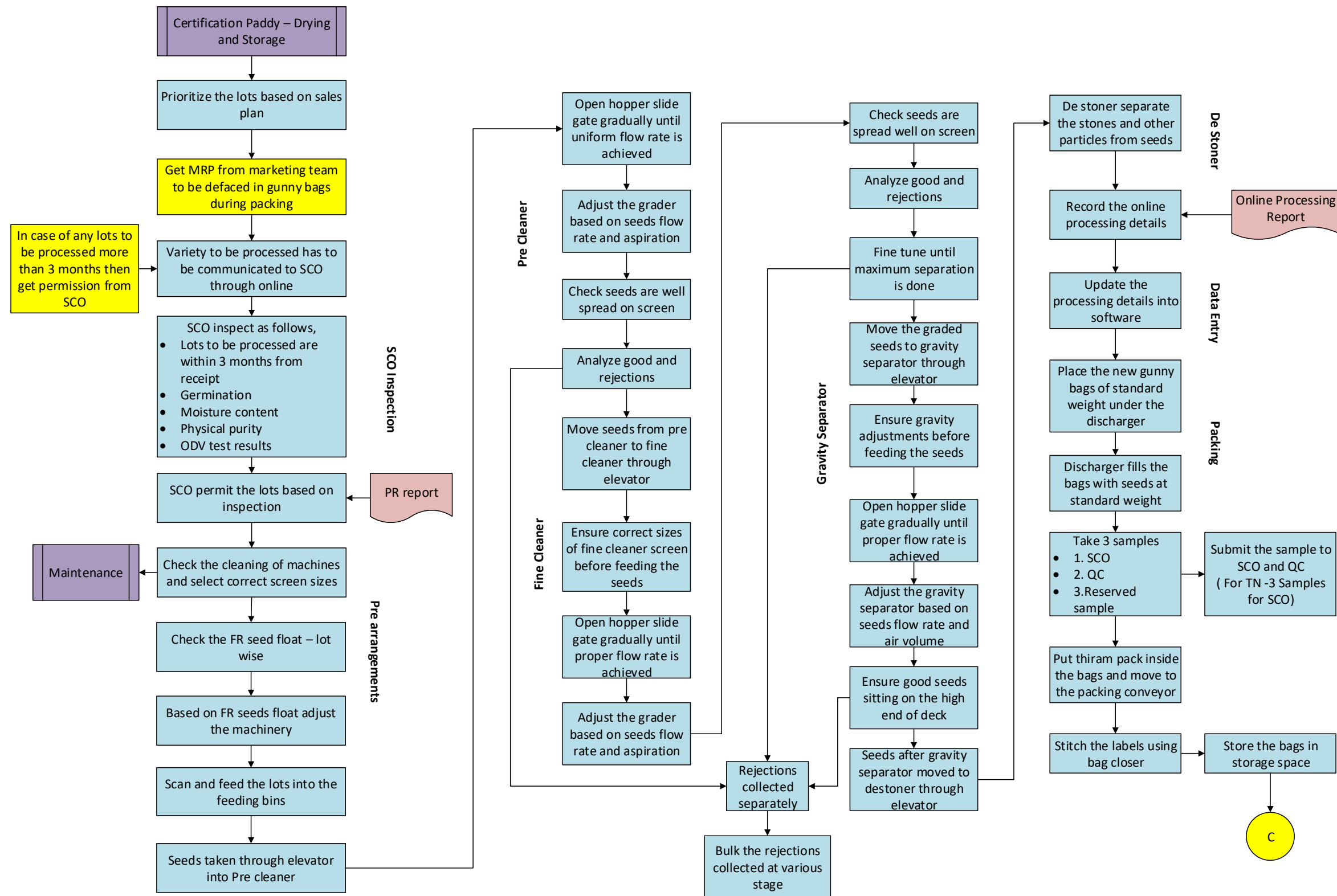
4. B.4.2 Drying

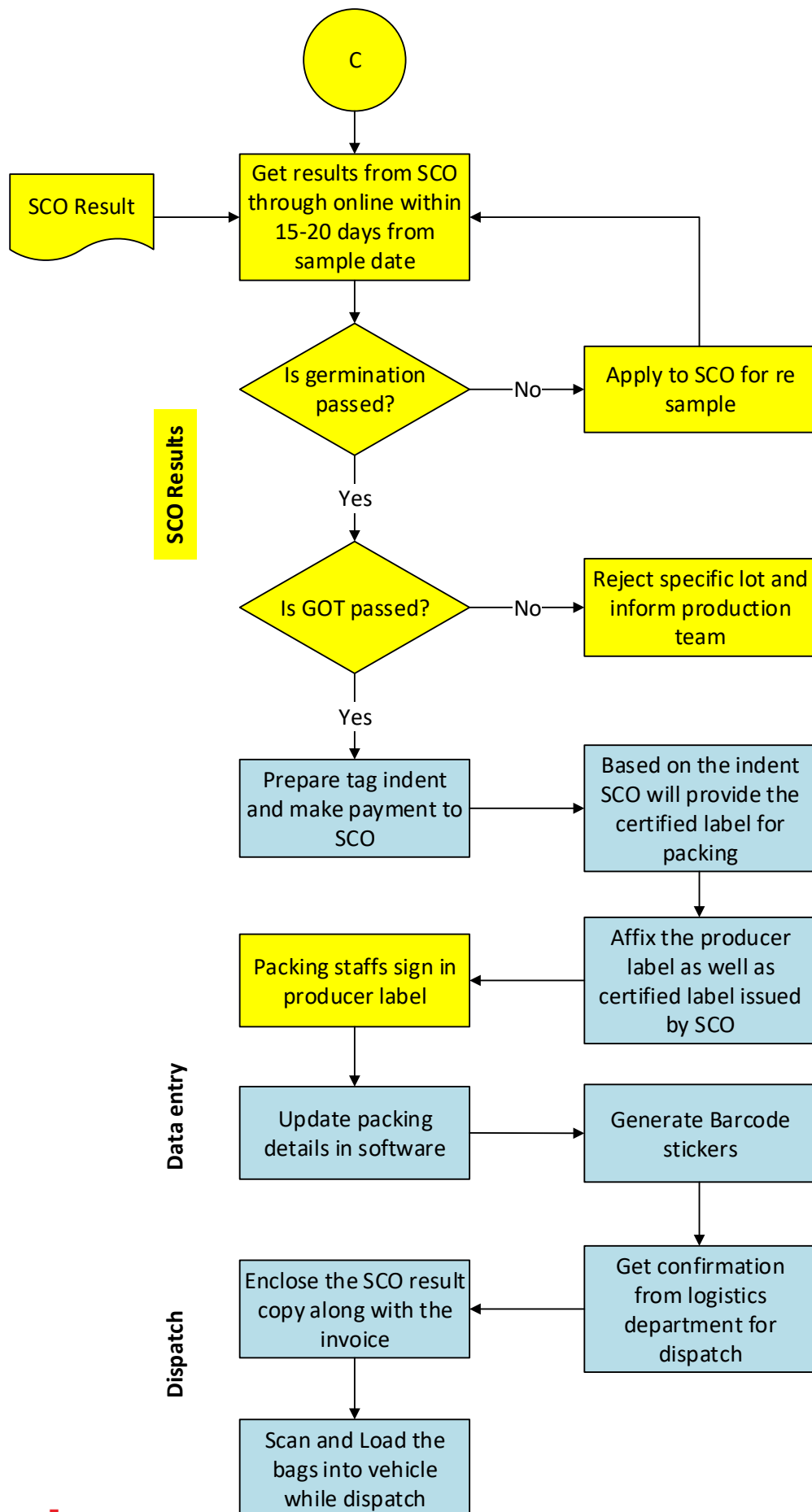
4. B.4.3 Storage and preservation

Process	Maker	Checker	Approver
4. B.4.1 Verification			
1) Check the received paddy with grower terms and conditions	Assistant Manager/Plant Supervisor	Manager – Processing	
2) If the seeds are received as dry stage then check the moisture level using moisture meter	Assistant Manager/Plant Supervisor	Manager – Processing	
3) Take samples from the dry seeds and send to STL for ODV test	Assistant Manager/Plant Supervisor	Manager – Processing	
4) If the seeds are received in wet condition then check the moisture level using moisture meter and move the seeds for drying	Assistant Manager/Plant Supervisor	Manager – Processing	
5) In case of seeds are not found as per the terms and conditions then consider the drying cost and inform accounts for deduction at the time of payment	Assistant Manager/Plant Supervisor	Manager – Processing	
4. B.4.2 Drying			
1) Ensure the drying area is clean and dry the seeds lot wise in sun to bring the moisture level of 10% or below	Assistant Manager/Plant Supervisor	Manager – Processing	

Process	Maker	Checker	Approver
	Supervisor/ Labours		
2) Store the dried seeds in 70 Kg bags and send sample to STL for ODV testing	Labours	Assistant Manager/Pl ant Supervisor	
3) Update the drying details in software	Data entry operator	Assistant Manager/Pl ant Supervisor	
4) Get the ODV results from STL and check whether the result is positive	Assistant Manager/Pl ant Supervisor	Manager – Processing	
5) Inform the production, IT and accounts if the ODV result is not positive	Assistant Manager/Pl ant Supervisor	Manager – Processing	
6) Pass purchase return entry for failed lots by IT team and return the lots to the concern grower/organizer on the approval of GM production	IT - Executive	Manager – Processing	
7) Move the positive lots to storage area	Labours	Assistant Manager/Pl ant Supervisor	
4. B.4.3 Storage and Preservation			
1) Ensure the storage area is maintained with proper spacing of rows and columns	Assistant Manager/Pl ant Supervisor	Manager – Processing	
2) Ensure the crop is stored based on the variety wise and lot wise storage	Assistant Manager/Pl ant Supervisor	Manager – Processing	
3) Coordinate the third party for spraying and fumigation schedule as follows <ul style="list-style-type: none"> Spraying – Three times a week Fumigation – Once in 45 days 	Assistant Manager/Pl ant Supervisor	Manager – Processing	

4. B.5 CERTIFICATION PADDY – ONLINE PROCESSING AND PACKING





Sub-process Owner:

Processing Manager

Departments Involved:

Processing

Key activities:

- 4. B.5.1 SCO Inspection
- 4. B.5.2 Prearrangements
- 4. B.5.3 Pre-Cleaner/Fine Cleaner
- 4. B.5.4 Gravity separator/Destoner
- 4. B.5.5 Packing

Process	Maker	Checker	Approver
4. B.5.1 SCO Inspection			
1) Prioritize the lots based on sales plan	Plant Supervisor	Manager – Processing	
2) Get MRP from marketing team to be defaced in gunny bags during packing	Manager – Processing	Head – Commercial & PS (TN)	
3) Communicate to SCO to inspect and permit the process of variety as follows: <ul style="list-style-type: none"> • Lots to be processed are within 3 months from receipt • Moisture content • Physical purity • ODV test results 	Assistant Manager/Plant Supervisor/ Plant Supervisor	Manager – Processing	
4) In case of any lots to be processed more than 3 months then get permission from SCO before processing	Assistant Manager/Plant Supervisor	Manager – Processing	
4. B.5.2 Pre-arrangements			
1) Check the cleaning of machines and select correct screen size	Assistant Manager/Plant Supervisor	Manager – Processing	
2) Check FR seed float – lot wise and adjust the machine	Assistant Manager/Plant Supervisor	Manager – Processing	

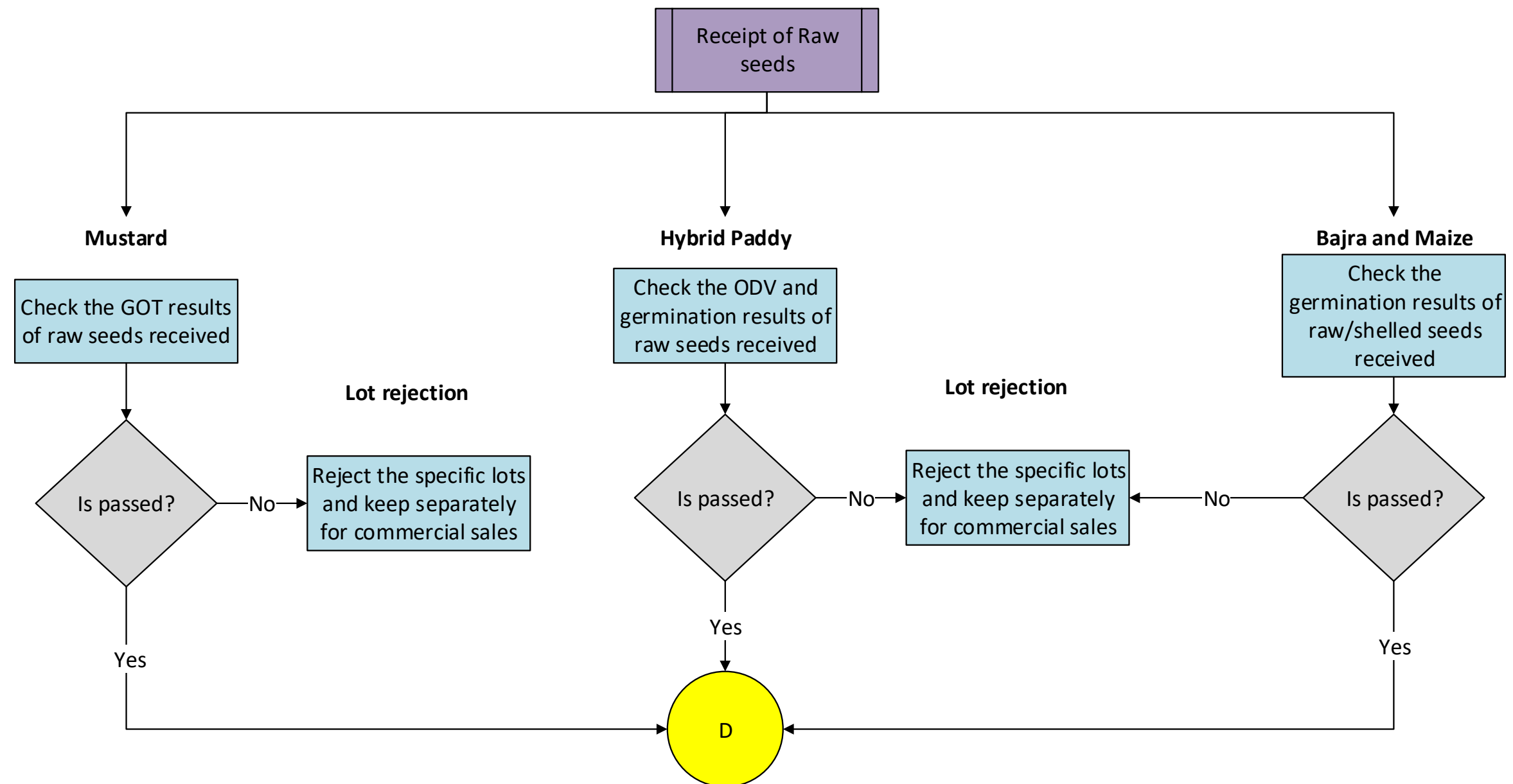
Process	Maker	Checker	Approver
3) Scan and feed the lots into the feeding bins	Plant Assistants	Assistant Manager/Plant Supervisor	
4) Move the seeds to pre-cleaner through elevator	Plant Assistants	Assistant Manager/Plant Supervisor	
4. B.5.3 Pre-Cleaner/Fine Cleaner			
1) Open hopper slide gate gradually until uniform flow rate is achieved	Plant Assistants	Assistant Manager/Plant Supervisor	
2) Adjust the grader based on seeds flow rate and aspiration and ensure the seeds are well spread on the screen to analyze good and rejections	Plant Assistants	Assistant Manager/Plant Supervisor	
3) Rejections are collected separately at various stages	Plant Assistants	Assistant Manager/Plant Supervisor	
4) Move the seeds from pre-cleaner to fine cleaner through elevator and ensure correct sizes of fine cleaner screen before feeding the seeds	Plant Assistants	Assistant Manager/Plant Supervisor	
5) Open hopper slide gate gradually until proper flow rate is achieved	Plant Assistants	Assistant Manager/Plant Supervisor	
6) Adjust the grader based on seeds flow rate and aspiration and ensure the seeds are well spread on the screen to analyze good and rejections	Plant Assistants	Assistant Manager/Plant Supervisor	
7) Fine tune until maximum separation is done and move the seeds to gravity separator through elevator	Plant Assistants	Assistant Manager/Plant Supervisor	

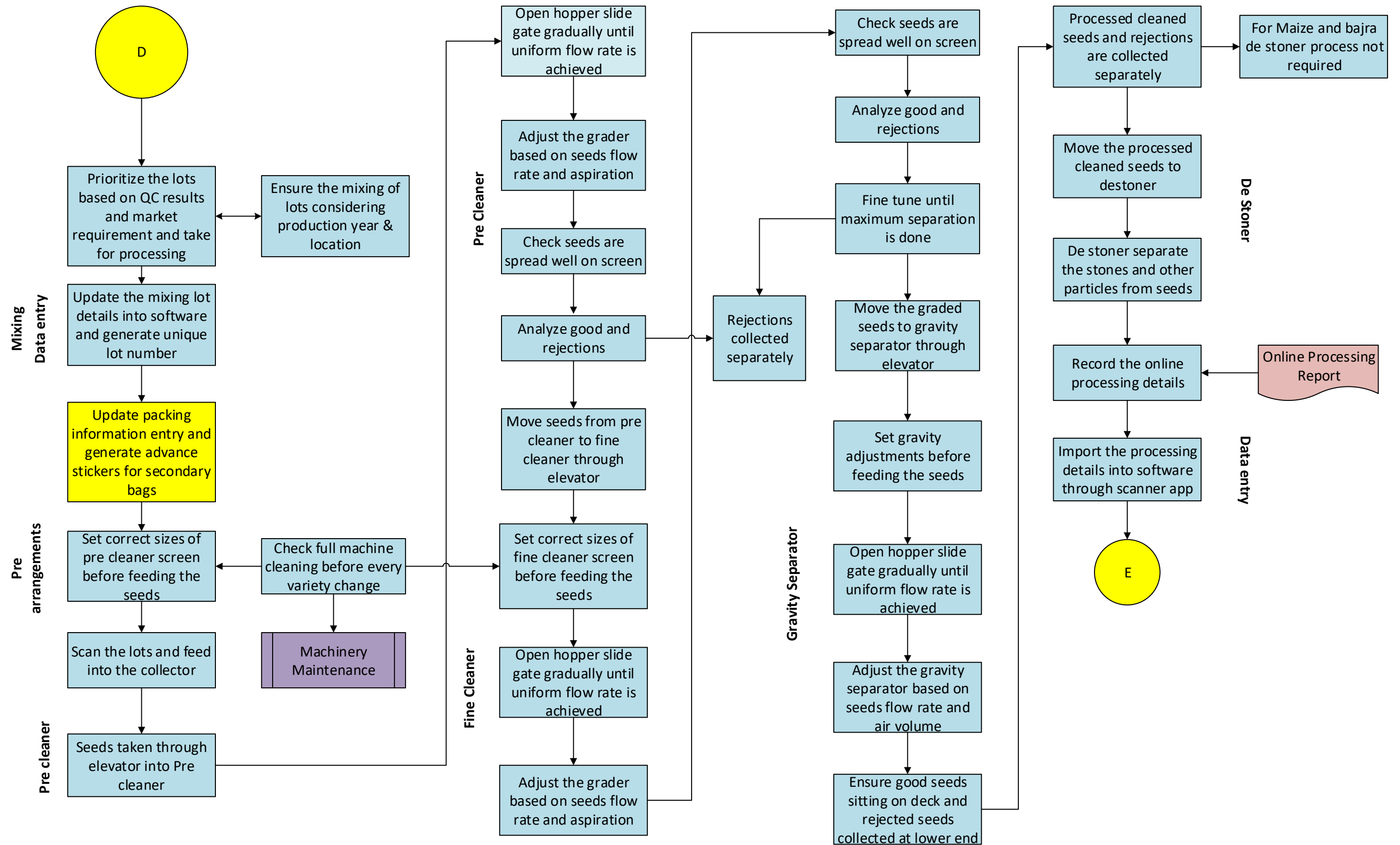
Process	Maker	Checker	Approver
4. B.5.4 Gravity Separator and Destoner			
1) Check gravity adjustments before feeding the seeds	Plant Assistants	Assistant Manager/Plant Supervisor	
2) Open hopper slide gate gradually until proper flow rate is achieved	Plant Assistants	Assistant Manager/Plant Supervisor	
3) Adjust the gravity separator based on seeds flow rate and air volume	Plant Assistants	Assistant Manager/Plant Supervisor	
4) Ensure good seeds sitting on the high end of deck and seeds after gravity separator moved to de stoner through elevator	Plant Assistants	Assistant Manager/Plant Supervisor	
5) De stoner separates the stone and other particles from seeds	Plant Assistants	Assistant Manager/Plant Supervisor	
6) Record the processing details in processing report	Plant Assistants	Assistant Manager/Plant Supervisor	
7) Import the processing details into software through scanner app	Data entry operator	Assistant Manager/Plant Supervisor	
4. B.5.5 Packing and dispatch			
1) Place the new gunny bag under the discharger and ensure discharger fills the bags with seeds at the standard weight	Plant Assistants	Assistant Manager/Plant Supervisor	
2) Submit the sample to SCO and QC by taking samples from SCO, QC and Reserved sample (For TN – 3 samples for SCO)	Assistant Manager/Plant	Manager - Processing	

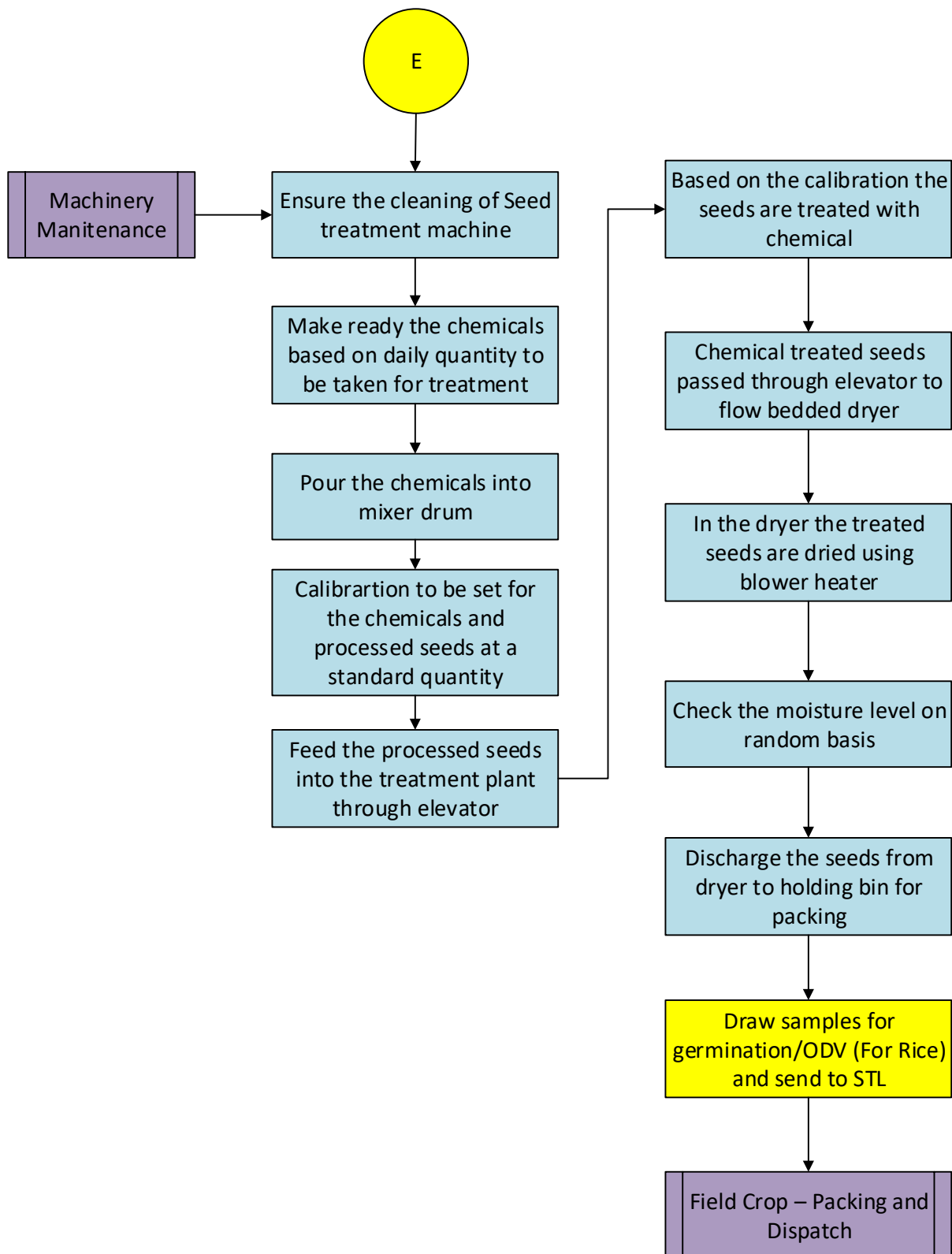
Process	Maker	Checker	Approver
	Plant Supervisor		
3) Put thiram pack inside the bags and move to the packing conveyor	Plant Assistants	Assistant Manager/Plant Supervisor	
4) Stitch the labels using bag closer and store the bags in storage area	Plant Assistants	Assistant Manager/Plant Supervisor	
5) Get results from SCO through Online portal within 15-20 days from the date of sample	Assistant Manager/Plant Supervisor	Manager - Processing	
6) In case germination not passed as per SCO then apply to SCO for re sample and get results	Assistant Manager/Plant Supervisor	Manager - Processing	
7) In case if GOT is not passed as per SCO then reject specific lots and inform to production team	Assistant Manager/Plant Supervisor	Manager - Processing	
8) If germination and GOT passed then prepare tag indent and make payment to SCO for getting certified label	Assistant Manager/Plant Supervisor	Manager - Processing	
9) Receive certified label from SCO and affix the same along with producer label in the packed bags (GOT Passed lots)	Assistant Manager/Plant Supervisor/ Plant assistants	Manager - Processing	
10) Packing staffs sign in the producer label and deface the MRP given by marketing team	Packing assistants	Assistant Manager/Plant Supervisor	

Process	Maker	Checker	Approver
11) Update the packing details into software through scanner app and generate Barcode stickers for the packed bags	Data entry operator	Assistant Manager/Plant Supervisor	
12) Get confirmation from logistics department for transport arrangement for dispatch	Assistant Manager/Plant Supervisor	Manager - Processing	
13) Enclose the SCO result along with the invoice during dispatch	Assistant Manager/Plant Supervisor	Manager - Processing	
14) Scan the bags before loading into vehicle during dispatch	Plant assistants	Assistant Manager/Plant Supervisor	

4. B.6 FIELD CROPS – ONLINE PROCESSING (EXCLUDING PADDY)







Sub-process Owner:

Processing Manager

Departments Involved:

Processing
QC

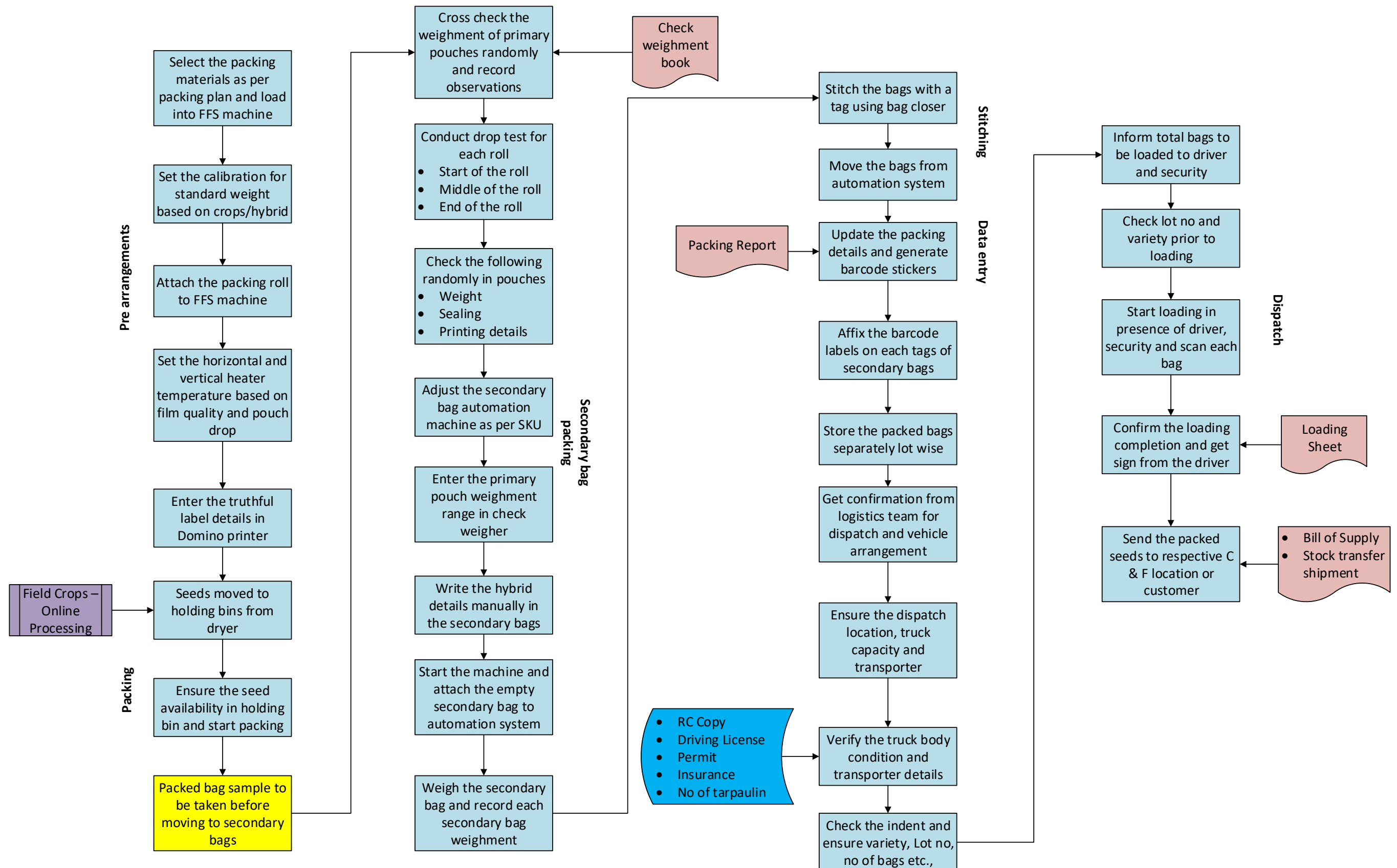
Key activities:

- 4. B.6.1 Quality results checking
- 4. B.6.2 Pre-cleaner/Fine cleaner
- 4. B.6.3 Gravity separator/De stoner
- 4. B.6.4 Seed treatment process

Process	Maker	Checker	Approver
4. B.6.1 Quality results checking			
1) Check the quality results of raw seeds <ul style="list-style-type: none"> Mustard – GOT Hybrid Paddy – ODV and germination Bajra and Maize – Germination 	Plant Supervisor	Manager - Processing	
2) In case of failure, reject the particular lot and keep separately for commercial sales	Plant Supervisor	Manager - Processing	
4. B.6.2 Pre-Cleaner/Fine Cleaner			
1) Check for the pass result and prioritize the lots based on QC results and market requirement and ensure the mixing of lots considering production year and location before processing	Plant Supervisor	Manager - Processing	
2) Update the mixing lots details in software and generate unique lot number	Data entry operator	Plant Supervisor	
3) Update packing information entry and generate advance stickers for secondary bags	Data entry operator	Plant Supervisor	
4) Check full machinery cleaning before every variety change and set correct size on screen for pre-cleaner before feeding the seeds	Plant Supervisor	Manager - Processing	
5) Scan the lots and feed into the collector	Plant assistants	Plant Supervisor	
6) Seeds taken through elevator into pre-cleaner and open hopper slide gate gradually until uniform flow rate is achieved	Plant assistants	Plant Supervisor	
7) Adjust the grader based on seeds flow rate and aspiration and ensure whether the seeds are well spread on the screen	Plant assistants	Plant Supervisor	
8) Analyze good and rejections and fine tune until maximum separation is done	Plant assistants	Plant Supervisor	

Process	Maker	Checker	Approver
9) Move the graded seeds through elevator to gravity separator and adjust the gravity before feeding the seeds	Plant assistants	Plant Supervisor	
4. B.6.3 Gravity Separator/De Stoner			
1) Open hopper slide gate gradually until uniform flow rate is achieved	Plant assistants	Plant Supervisor	
2) Adjust the gravity separator based on seeds flow rate and air volume and ensure good seeds sitting on deck and rejected seeds collected at lower end	Plant assistants	Plant Supervisor	
3) Processed cleaned seeds and rejections are collected separately (For maize and bajra de stoner process not required)	Plant assistants	Plant Supervisor	
4) Move the processed cleaned seeds to destoner to separate the stone and other particles from seeds	Plant assistants	Plant Supervisor	
5) Record the details in online processing report	Plant assistants	Plant Supervisor	
6) Import the processing details into software through scanner app	Data entry operator	Plant Supervisor	
4. B.6.4 Seed treatment process			
1) Ensure the cleaning of seed treatment machine	Plant Supervisor	Manager – Processing	
2) Check the chemical quantity to be taken for treatment and pour the chemical into mixer drum	Plant assistants	Plant Supervisor	
3) Set composition at a standard quantity for the seeds to be treated with chemical and feed the seeds in the treatment plant through elevator	Plant assistants	Plant Supervisor	
4) Check the Chemical treated seeds are passed through the elevator to flow bedded dryer and are dried using blower heater	Plant assistants	Plant Supervisor	
5) Check the moisture level on random basis	Plant assistants	Plant Supervisor	
6) Discharge the seeds from dryer to holding bin for packing	Plant assistants	Plant Supervisor	
7) Draw samples before packing for Germination/ODV (For Rice) and send to STL	Plant assistants	Plant Supervisor	

4. B.7 FIELD CROPS – ONLINE PACKING AND DISPATCH



Sub-process Owner:

Processing Manager

Departments Involved:

Processing
Logistics

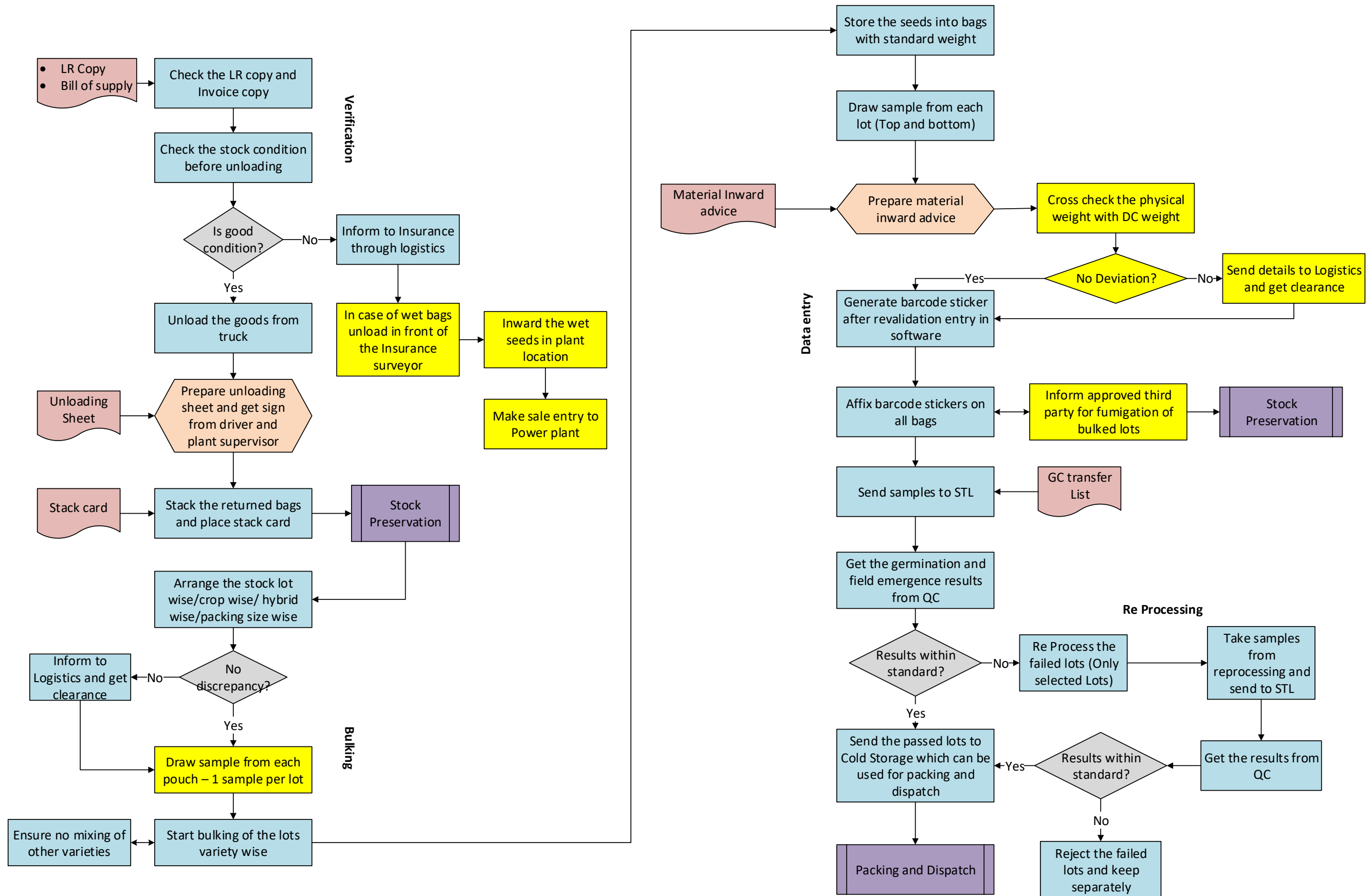
Key activities:

- 4. B.7.1 Pre-arrangements
- 4. B.7.2 Online Packing
- 4. B.7.3 Dispatch

Process	Maker	Checker	Approver
4. B.7.1 Pre-arrangements for packing			
1) Select the packing materials as per packing plan and load into FFS machine	Plant assistants	Plant Supervisor	
2) Set calibration for standard weight based on the crops/hybrid and attach the packing roll to FSS machine	Plant assistants	Plant Supervisor	
3) Set the horizontal and vertical heater temperature based on film quality and pouch drop	Plant assistants	Plant Supervisor	
4) Enter the truthful label details in domino printer	Plant assistants	Plant Supervisor	
4. B.7.2 Online packing			
5) Check the Seeds move to holding bins from dryer	Plant assistants	Plant Supervisor	
6) Ensure the seed availability in holding bin and start packing	Plant assistants	Plant Supervisor	
7) Take packed bags sample before moving to secondary bags	Plant assistants	Plant Supervisor	
8) Cross check the weighment of primary pouches randomly and record observations	Plant assistants	Plant Supervisor	
9) Conduct drop test for each roll based on <ul style="list-style-type: none"> Start of the roll Middle of the roll End of the roll 	Plant assistants	Plant Supervisor	
10) Check the pouches randomly based on <ul style="list-style-type: none"> Weight Sealing Printing details 	Plant assistants	Plant Supervisor	
11) Adjust the secondary bag automation machine for packing as per SKU	Plant assistants	Plant Supervisor	
12) Enter the primary pouch weighment range in check weigher	Plant assistants	Plant Supervisor	
13) Write the hybrid details manually in the secondary bags and start the machine and attach the empty secondary bag to the automation system	Plant assistants	Plant Supervisor	

Process	Maker	Checker	Approver
14) Weigh the secondary bag and record the weight	Plant assistants	Plant Supervisor	
15) Stitch the bags with a tag using bag closer and move the bags from automation system	Plant assistants	Plant Supervisor	
16) Update the packing details in packing report and generate barcode stickers to affix the labels on each tag of secondary bags	Data entry operator	Plant Supervisor	
17) Store the packed bags separately lot wise	Plant assistants	Plant Supervisor	
18) Get confirmation from logistics for dispatch and ensure the dispatch location, truck capacity and transporter	Plant Supervisor	Manager – Processing	
19) Check the truck body condition and transporter details based on <ul style="list-style-type: none"> • RC Copy • Driving License • Permit • Insurance • No of tarpaulin 	Security Officer/Plant Supervisor	Manager – Processing	
20) Check the indent and ensure variety, Lot no, No of bags etc.	Plant Supervisor	Manager – Processing	
21) Inform the total bags to be loaded to the driver and the security and check the Lot no and variety before loading	Plant Supervisor	Manager – Processing	
4. B.7.3 Dispatch			
22) Start loading the lots by scanning each bag with the presence of driver & security	Labours		
23) Confirm the loading completion with the help of loading sheet and get sign from the driver		Manager – Processing	
24) Send the packed seeds to respective C & F Location or customer with the below documents, <ul style="list-style-type: none"> • Bill of supply • Stock transfer shipment 		Manager – Processing	

4. B.8 FIELD CROPS - SALES RETURN BULKING



Sub-process Owner:

Processing Manager

Departments Involved:

Processing

Logistics

QC

Key activities:

4.B.8.1 Sales return verification

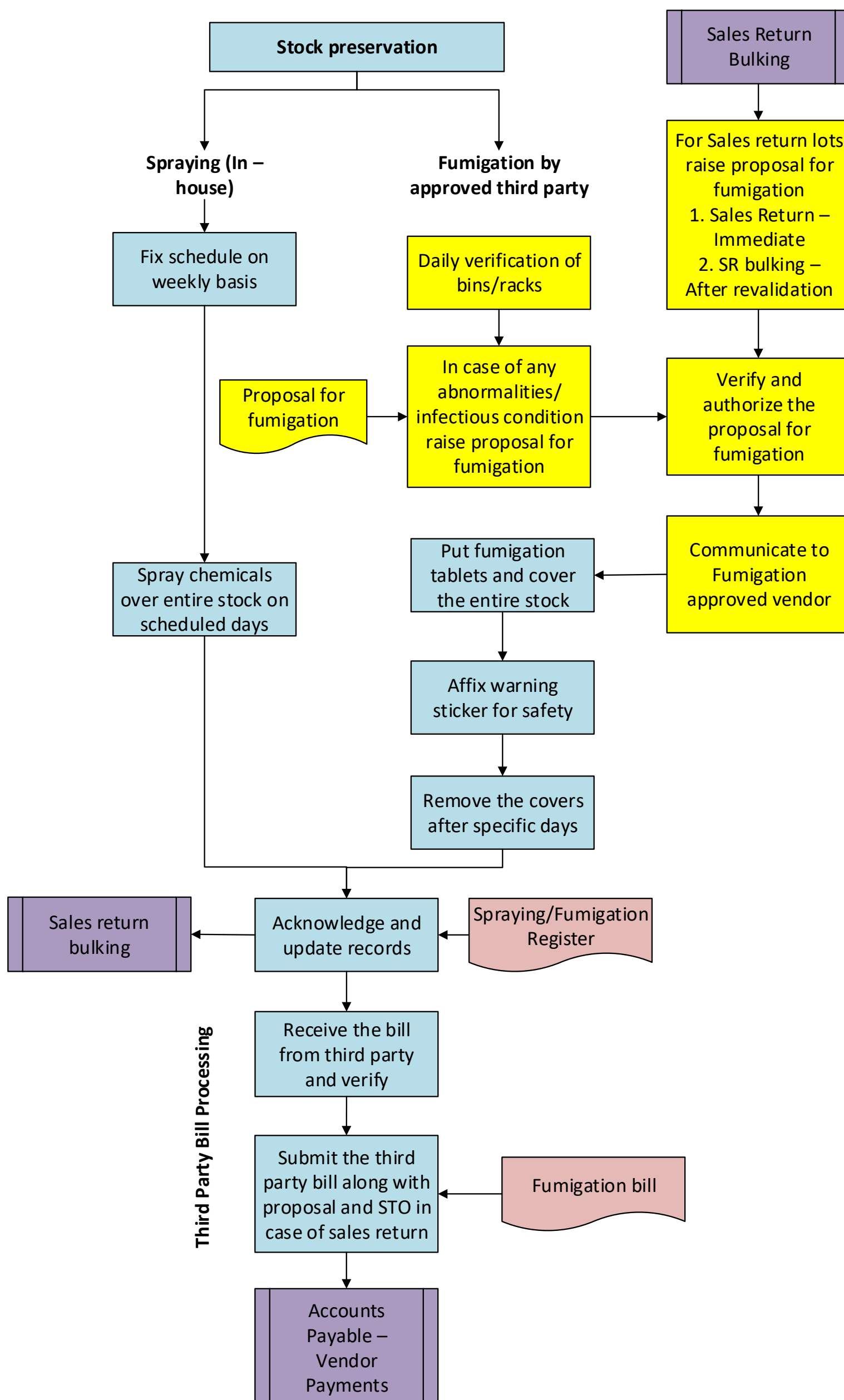
4.B.8.2 Preservation & Bulking

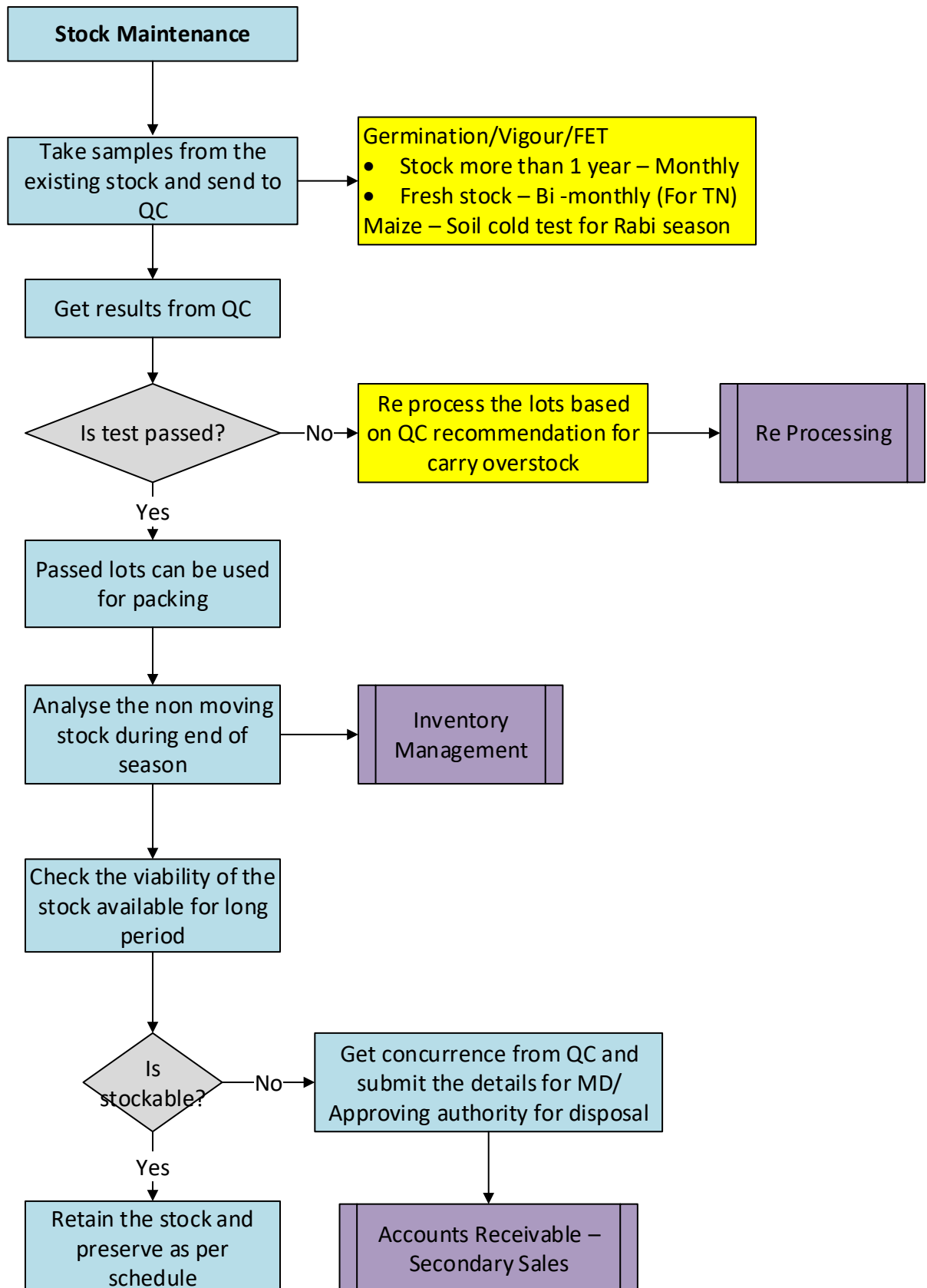
Process	Maker	Checker	Approver
4.B.8.1 Sales return verification			
1) Receive the sales return seeds through C & F and verify the LR copy and Invoice copy	Plant Supervisor	Manager – Processing	
2) Check whether the stock condition is good before unloading and unload the goods from truck	Plant Supervisor/Labours	Manager – Processing	
3) In case the condition of stock is not good, inform to insurance through logistics and unload in front of Insurance Surveyor	Plant Supervisor/Labours	Manager – Processing	
4) Inward the wet seeds into plant location	Data entry operator	Plant Supervisor	
5) Make sale entry to power plant	Data entry operator	Plant Supervisor/Manager – Processing	
6) Prepare unloading sheet and get sign from the driver and plant supervisor	Labours	Manager – Processing	
7) Stack the returned bags and place stack card	Labours	Plant Supervisor	
4.B.8.2 Preservation & Bulking			
1) Inform the third party to check fumigation of the returned seeds immediately	Plant Supervisor	Manager – Processing	

Process	Maker	Checker	Approver
2) Arrange the stock to ensure there is no discrepancies based on Lot wise /Crop wise/ Hybrid wise/ Packing size wise	Plant Supervisor	Manager – Processing	
3) In case of discrepancies, inform to logistics and get clearance	Plant Supervisor	Manager – Processing	
4) Draw sample from each pouch – one sample per lot	Plant Assistants	Plant Supervisor	
5) Start bulking of lots variety wise and ensure there is no mixture of other varieties	Plant Supervisor	Manager – Processing	
6) Store the seeds into bags with standard weight and draw sample from each lot (Top and bottom)	Plant Supervisor	Manager – Processing	
7) Prepare material inward advice	Plant Supervisor	Manager – Processing	
8) Cross check the physical weight with DC weight	Data entry Operator	Plant Supervisor	
9) In case of deviation send details to Logistics and get clearance	Data entry Operator	Plant Supervisor	
10) Make revalidation entry in software and generate barcode stickers	Data entry Operator	Plant Supervisor	
11) Affix barcode stickers on all bags	Plant Assistants	Plant Supervisor	
12) Inform the third party for fumigation of the bulked seeds	Plant Supervisor	Manager – Processing	
13) Send samples to STL for testing	Plant Supervisor	Manager – Processing	
14) Get the germination and field emergence results from QC and ensure the results are within the standards	Plant Supervisor	Manager – Processing	
15) Store the QC passed lots that are within standards and can be used for packing and dispatch	Plant Supervisor	Manager – Processing	
16) In case of germination results are not within the standards re process the failed lots (Only selected lots)	Plant Supervisor	Manager – Processing	

Process	Maker	Checker	Approver
17) Send re process samples to STL and get results from QC	Plant Supervisor	Manager – Processing	
18) Check the results are within the standards and send the QC passed lots to cold storage location	Plant Supervisor	Manager – Processing	
19) In case the results are not within the standards, reject the lot and keep separately for sub- standard sales	Plant Supervisor	Manager – Processing	

4. B.9. FIELD CROPS - STOCK PRESERVATION AND MAINTENANCE





Sub-process Owner:

Processing Manager

Departments Involved:

Processing

QC

Key activities:

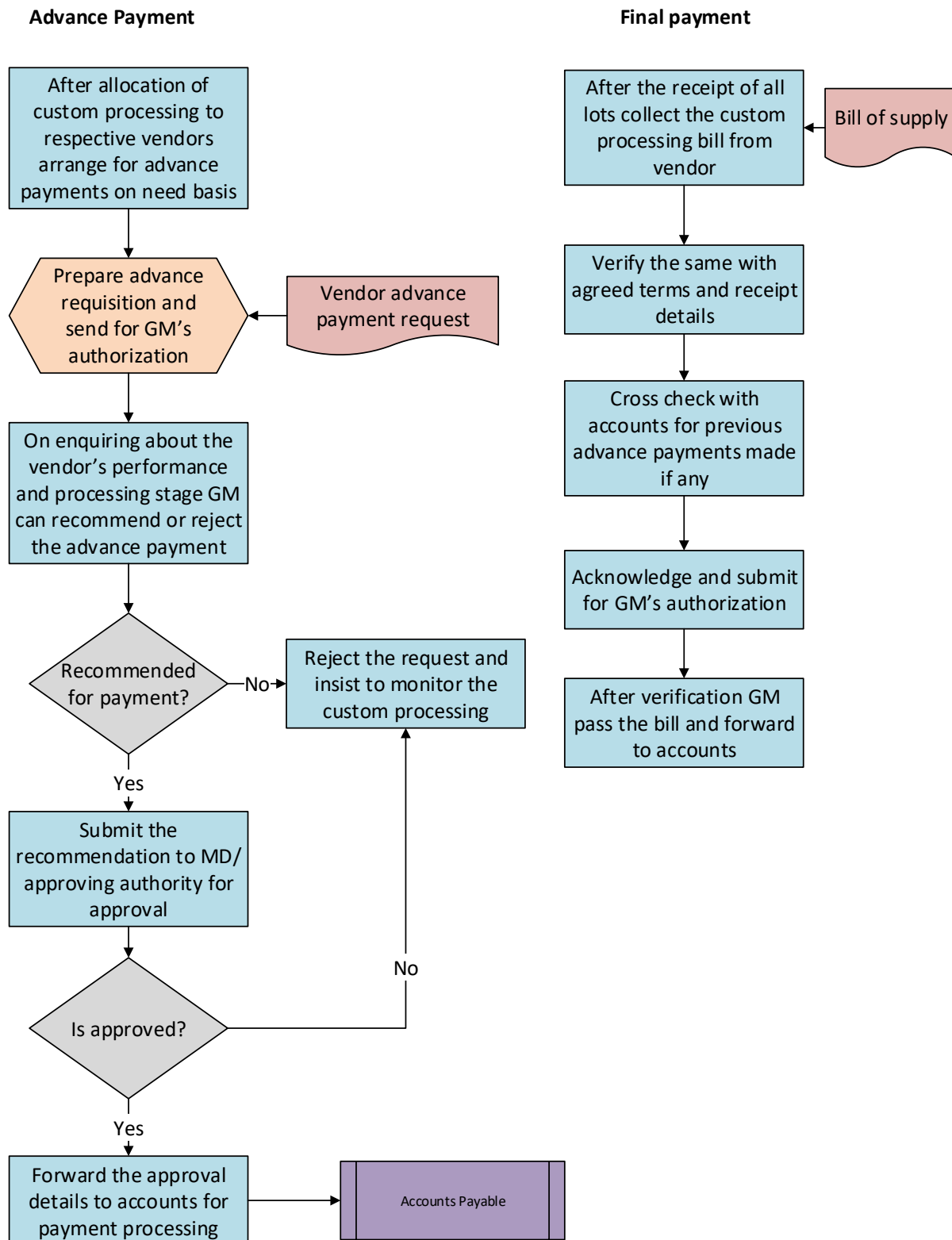
4. B.9.1 Stock Preservation

4. B.9.2 Stock Maintenance

Process	Maker	Checker	Approver
4. B.9.1 Stock Preservation			
Spraying – In house			
1) Fix schedule of twice a week of spraying	Supervisor - Spraying and Fumigation	Manager – Processing	
2) Get spraying chemicals from stores and spray over the stock as per schedule	Plant Assistants	Supervisor - Spraying and Fumigation	
3) Ensure spraying of chemicals over entire stock on scheduled days	Plant Assistants	Supervisor - Spraying and Fumigation	
4) Update the spraying details in Spraying/fumigation register	Plant Assistants	Supervisor - Spraying and Fumigation	
Fumigation – Approved Third party			
1) Verify the storage bins and racks on daily basis	Supervisor - Spraying and Fumigation	Manager – Processing	
2) In case of any abnormalities/infectious condition then raise proposal for Fumigation	Supervisor - Spraying and Fumigation	Manager – Processing	
3) Verify and authorize the proposal for fumigation	Manager – Processing		
4) Communicate to the approved third party for fumigation	Supervisor - Spraying and Fumigation	Manager – Processing	
5) Ensure fumigation tablets are applied over the entire stock and warning sticker affixed on it for safety purpose	Supervisor - Spraying and Fumigation	Manager – Processing	
6) Ensure the removal of cover after specific days	Supervisor - Spraying and Fumigation	Manager – Processing	

7) Check and update the records in spraying and fumigation register	Supervisor - Spraying and Fumigation	Manager – Processing	
8) Receive the bill from third party and verify to recommend accounts for payment	Supervisor - Spraying and Fumigation	Manager – Processing	
9) Submit the fumigation bill along with proposal for fumigation and STO in case of Sales return	Supervisor - Spraying and Fumigation	Manager – Processing	
4. B.9.2 Stock Maintenance			
1) Take samples from the existing stock and send to QC as follows Germination/Vigour/FET • Stock more than a year - Monthly • Fresh Stock – Bi-monthly (For TN) • Maize – Soil cold test during Rabi season	Plant Supervisor	Manager – Processing	
2) In case the QC result is failed then Re process the lots based on QC recommendation	Plant Supervisor	Manager – Processing	
3) Ensure the result from QC is pass for packing purpose	Plant Supervisor	Manager – Processing	
4) Analyze the non- moving stock during end of season	Plant Supervisor	Manager – Processing	
5) Check the viability of the stock availability for long period and retain them to preserve as per the schedule	Plant Supervisor	Manager – Processing	
6) In case the stock is not viable then get concurrence from QC and get approval from MD for disposal	Manager – Processing	Senior GM - MFG	MD/Appro ving Authority

4. B.10 CUSTOM PROCESSING – PAYMENT ARRANGEMENT



Sub-process Owner:

Processing Manager

Departments Involved:

Processing, Accounts

Key activities:

4. B.10.1 Advance Payment

4. B.10.2 Final Payment

Process	Maker	Checker	Approver
4. B.10.1 Advance payment			
1) Check allocation of custom processing to respective vendors and arrange for advance payments on need basis	Manager - Processing		
2) Prepare vendor advance payment request and send to GM for authorization	Manager - Processing	Senior GM - MFG	Senior GM - MFG
3) Ensure the vendor's performance and processing stage based on this GM can recommend or reject the advance payment	Senior GM - MFG	Senior GM - MFG	
4) Reject the request in case of no approval from GM and insist to monitor the custom processing	Manager - Processing	Senior GM - MFG	
5) Check whether the GM has recommended for the payment and submit the request to MD/Approving authority for approval	Manager - Processing	Senior GM - MFG	MD/Approving Authority
6) Forward the approval details to accounts for payment processing	Manager - Processing	Senior GM - MFG	
7) Reject the request in case of no approval from MD and insist to monitor the custom processing	Manager - Processing	Senior GM - MFG	
4. B.10.2 Final Payment			
1) Collect the bill of supply from vendor after the receipt of all lots	Manager - Processing	Senior GM - MFG	
2) Verify the bill of supply details with agreed terms and receipt details	Manager - Processing	Senior GM - MFG	
3) Cross check with accounts to ensure if any previous advance payments are made	Manager - Processing	Senior GM - MFG	
4) Acknowledge and submit for GM authorization	Manager - Processing	Senior GM - MFG	Senior GM - MFG
5) Verify and finalize the bill from GM and pass the bill and forward to accounts	Manager - Processing	Senior GM - MFG	