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| Title | **Manage the procurement of chillies** | | |
| Level | **3** | **Credits** | **16** |

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| Purpose | These competency standards will ensure that the trainee is able to identify, select and procure suitable whole chilli lots for processing |

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| Classification ISCED | 0811 Crop and livestock production |

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| Available grade | Competent / Not yet competent |

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| Modification history | N/A |

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| **Competency Unit** | **Performance Criteria** | **Knowledge and Understanding** |
| **A1-** Identify the appropriate lots of whole chillies for procurement from the market | **Trainee will be able to:**  **P1.** Identify different varieties of chillies  **P2.** Recognize the sub types of chilli variety ‘Dandi cut’  **P3.** Recognize hybrid varieties of chillies  **P4.** Calculate the proportion of different sub types of Dandi cut chillies within a chilli lot  **P5.** Distinguish between normal and damaged pods  **P6.** Identify shrivelled chilli pods  **P7.** Recognize the chillies that are fungal infested, physically damaged, discoloured etc.  **P8.** Calculate the proportion of normal pods in a lot  **P9.** Calculate the proportion of each type of damaged pods in a lot  **P10.** Calculate the cost analysis of chilli lot | **Trainee will be able to:**  **K1.** Explain the distinguished characteristics of major chilli varieties and its sub types  **K2.** Describe the following terms:   * Hybrid varieties * Healthy pods/seeds * Damaged pods/seeds * Shrivelled pods * Discoloured pods   **K3.** Give reasons of procuring good quality chillies  **K4.** Estimate the proportion of healthy pods in the offered consignment  **K5.** Describe the importance of physical examination of chillies  **K6.** Explain the role of following factors in determining chilli quality:   * Moisture * Aflatoxin |

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|  | **P11.** Negotiate the price of selected chilli lot  **P12.** Identify different markets for chilli procurement  **P13.** Recognize the chilli variety which is preferred for processing | * Pods colour * Pungency   **K7.** Compare the permissible limits of aflatoxin in various countries and prevailing situation in Pakistan  **K8.** Give goods reasons of not to mix the damaged pods with healthier pods  **K9.** Exhibit salient features of chilli markets in Pakistan |
| **A-2:** Undertake the testing of offered lot or get the analysis done from authenticated laboratory | **P1.** Handle samplers  **P2.** Handle sample dividers in the market  **P3.** Draw the random samples using appropriate equipment and procedure  **P4.** Perform mixing and dividing of primary samples to prepare composite sample from primary samples  **P5.** Select the sampling bag  **P6.** Label the sample to include the information like date of sampling, sample collector name, chilli lot identity etc.  **P7.** Prepare representative samples  **P8.** Seal the sample to protect and preserve the sample  **P9.** Ascertain the quality of chilli pods offered for procurement by undertaking physical observation | **K1.** Explain the characteristics of chilli variety that are important to know for processing  **K2.** Give introduction of different types of samplers and dividers  **K3.** Draw representative sample by random sampling  **K4.** Describe the Importance of randomized chilli sampling  **K5.** Select equipment required for sampling and explain their use  **K6.** Define basic requirements of chilli for processing  **K7.** Explain the important components of a chilli analysis report  **K8.** Evaluate the chilli analysis report  **K9.** Explain the importance of correct labelling  **K10.** Explain the requirement and importance of |

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|  | or examination  **P10.** Perform moisture test using portable moisture tester or get the moisture tested from laboratory  **P11.** Perform aflatoxin test using portable aflatoxin tester or get it analysed from laboratory  **P12.** Calculate the proportion of foreign matter in chilli lot  **P13.** Perform pungency test or get it tested from laboratory  **P14.** Perform colour test by visual examination or get it tested laboratory | sampling bags  **K11.** Describe the importance of storage of chilli samples to conserve moisture and other parameters  **K12.** Demonstrate the impact of physical observation during selection of lot  **K13.** Explain the following factors in determining chilli quality:   * moisture content * aflatoxin * colour * pungency   **K14.** Elaborate separation of foreign material from selected lot |
| **A-3:** Select the chilli lot for procurement | **P1.** Determine the physical condition of chilli sample representing a specified chilli lot  **P2.** Determine the quality of chilli lot by evaluating test report  **P3.** Distinguish between good and poor chilli lot  **P4.** Compare different types of lots keeping in view the price structure  **P5.** Select the whole chilli lots on the basis of physical examination, analytical report and offered price  **P6.** Negotiate on the price | **K1.** Explain the differentiating parameters between old and new crop  **K2.** Explain the impact of mixing of old and new crop  **K3.** Explain the identifying characteristics of good quality chillies  **K4.** Explain the basic requirement for the selection of good quality chillies  **K5.** Ascertain the trends of chilli market  **K6.** Distinguish between damaged and normal pods  **K7.** Explain the differentiating factors of pure and hybrid |

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|  | **P7.** Avoid the mixing of good and bad quality chilli lots  **P8.** Decide suitable chilli lots for processing  **P9.** Procure good chilli lots that are normal in shape, size, colour, disease free, belongs to one variety etc. from reliable dealers/traders | chilli varieties  **K8.** Calculate the cost effectiveness of chilli lot at the time of selection  **K9.** List out the parameters of suitable chilli lot selection such as:   * Proportion of damaged pods * Percentage of foreign matters * Colour * Pungency * Proportion of sub varieties * Offered price * Shrivelled pods * Moisture content * Aflatoxin levels |
| **A-4:** Segregate the appropriate pods on the basis of their physical appearance | **P1.** Differentiate between healthier and damaged pods  **P2.** Identify various types of damages including discoloration, shrivelling, immaturation etc.  **P3.** Recognize the extent of damaged in the chilli pods e.g. minor, moderate and severe.  **P4.** Identify the damaged pods that are required to be separated from the chilli lot  **P5.** Test the proportion of damaged pods by using appropriate test like visual analysis  **P6.** Separate damaged pods from chilli lot | **K1.** Describe different types of damaged pods including   * discoloured * immature * cracked * shrivelled * viscera bored * viscera opened * black spotted * fungal damaged   **K2.** Explain the determining of damaging extent in chilli pods  **K3.** Give classifying parameters of damaged pods i.e. minor, moderate and severely damaged pods |

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|  | **P7.** Handle severely damaged chilli pods  **P8.** Identify the suitable pods for processing  **P9.**Segregate the sub types within Dandi cut based on physical characteristics  **P10.**Separate shrivelled chilli pods  **P11.**Separate infested chillies from the chilli lot | **K4.** Elaborate the impact of minor, moderately and severely damaged pods on the overall quality of chilli lot  **K5.** Calculate of the percentage of minor, moderate and severe pods  **K6.** Describe different types of damaged pods that should be separated from chilli lot  **K7.** Explain procedures for segregating severely damaged pods  **K8.** Elaborate impact of appropriate/healthier/damaged pods on chilli processing  **K9.** Explain the physical characteristics of dandi cut variety  **K10.** Describe the procedure for handling of different types of damaged pods separated from lot |
| **A-5:** Manage the transportation of whole chillies to the factory | **P1.** Determine the suitability of transport to carry raw chillies  **P2.** Select suitable transport for chillies for transporting chillies from market to factory  **P3.** Negotiate with the transporter on price  **P4.** Supervise the loading of chillies on transport to avoid over filling, damaging etc.  **P5.** Transport chilli bags from market to factory   * Calculate the cost effectiveness of transport | **K1.** Describe the importance of transportation in chilli business and major requirements for transporting of chillies from market to factory  **K2.** Describe the impact of inappropriate transport on chilli quality  **K3.** Draw backs of over loading on chilli quality  **K4.** Calculate the cost effectiveness of transportation  **K5.** Explain transportation of chilli with precautionary measures during unfavourable weather |

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|  | * Determine the impact of improper transport on damage chilli during transportation * Handle the transportation during overcast conditions   **P6.** Supervise the unloading of chillies from transport to factory inlet  **P7.** Record keeping of procured chilli lot | **K6.** Describe the maintenance of hygienic conditions of vehicle during transportation  **K7.** Describe the maintenance of record of selected chilli lot before transportation |