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| Title | **Manage citrus orchard** |
| Level | **2** | **Credits** | **30** |

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| Purpose | These competency standards will ensure that the trainee will be able to perform citrus orchard management in local working conditions for field workers. |

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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 & Understanding** |
|  |  |  |  |  |
| **A1**. Prepare the | **P1.** Conduct soil sampling to identify characteristics of | **K1.** | Explain the importance of land preparation and layouts |
| Land |  | suitable soil as per industry requirements. | according to industry standard |
|  | **P2.** | Select suitable land as per recommendations. | **K2.** | Describe the ideal soil characteristics for citrus farming |
|  | **P3.** | Design irrigation layout to meet soil needs | **K3.** | Explain the merits and demerits of common irrigation |
|  |  |  | systems |
|  | **P4.** | Demonstrate the use of land preparation tools |  |  |
|  |  |  | **K4.** | Describe industry standards for planting processes. |
|  | **P5.** | Demonstrate the various steps for land |  |  |
|  |  | preparation including ploughing, leveling and | **K5.** | Explain composting processes |
|  |  | dressing |  |  |
|  | **P6.** | Dig pits for planting citrus plants |  |  |
|  | **P7.** | Prepare compost and fill it in the pits |  |  |
|  |  |  |  |
| **A2.** Manage | **P1.** Identify and select different latest citrus varieties | **K1.** | Describe the value and importance of right time and right |
| Orchard Plantation |  | recommended for citrus orchards. | variety keeping in view the established standards. |
|  | **P2.** | Determine and assess pre plantation conditions | **K2.** | Explain the ideal planting season. |
|  |  | (temperature, soil moisture conditions) |  |  |
|  |  |  | **K3:** Describe the post planting operational cycle |
|  | **P3.** | Observe the plantation timings |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  | **P4.** Transplant plants |  |  |  |  |  |
|  | **P5.** Carryout post plantation | operations including |  |  |
|  |  | irrigation, staking and making plant basin, hoeing |  |  |
|  |  | etc. |  |  |  |  |  |  |  |
|  |  |  |  |
| **A3.** Fertilizer | **P1.** Compare fertilizers types on the basis of brands, | **K1.** | Explain value of chemical fertilizer and green manure |
| Applications |  | chemical composition and formulation |  |  | applications. |
|  | **P2.** Demonstrate | different | methods | of | fertilizer | **K2.** | Describe different methods of fertilizer application |
|  |  | application as per industry recommendations. |  |  |
|  |  |  |  |  |  |  |  | **K3.** | Explain the processes of manure preparation |
|  | **P3.** Determine time and dosage of fertilizer application |  |  |
|  |  | keeping in view the industry standards and |  |  |
|  |  | manufacturers specifications. |  |  |  |  |
|  | **P4.** Prepare | and | apply the | farm yard | and green |  |  |
|  |  | manure |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| **A4.** Operate | **P1.** Identify | and | use different operational | tools for | **K1.** | Explain the importance of operational guidelines and |
| tools & equipments |  | various identified tasks |  |  |  | checklist of tools. |
|  | **P2.** Develop operational and maintenance | schedule to | **K2.** | Explain the importance of maintenance schedules to the |
|  |  | ensure availability and workability of required tools | operations of the orchard |
|  | **P3.** Identify and ensure tools safety measures |  |  |  |
|  |  |  |  |  |  |
| **A5.** Irrigation | **P1.** | Select the best means of available | water for | **K1.** | Demonstrate the best method of irrigation |
|  |  | irrigation |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  | **K2:** | Explain the annual and periodic schedules of irrigation |
|  | **P2.** | Schedule | the suitable time of irrigation as per |  |  |
|  |  | industry standards |  |  |  |  |  |
|  | **P3.** | Assess the effective method for irrigation in |  |  |
|  |  | accordance with recommendations for better |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  | results |  |
|  |  | **P4.** | Calculate the water requirements stage wise. |  |
|  |  | **P5.** | Identify specific tools of irrigation as per |  |
|  |  |  | industry standard. |  |
|  |  |  |  |  |
| **A6.** Pruning/ |  | **P1.** | Demonstrate the pruning methods as | **K1.** Describe the ways and benefits of pruning practices |
| training and |  |  | recommended by industry. |  |
| trimming |  |  |  | **K2.** Follow the guidelines and check list of each tool used |
|  |  | **P2.** | Demonstrate tools of pruning, training and |  |
|  |  |  | trimming |  |
|  |  | **P3.** | Identify the branches to be pruned for balance |  |
|  |  |  | canopy |  |
|  |  | **P4.** | Schedule post operation treatment |  |
|  |  |  |  |  |
| **A7**. | Apply | **P1.** | Identify the symptoms of all disease/ pests of | **K1.** Appraise the citrus diseases and pest infestation at |
| Pesticides, |  |  | citrus | economic threshold and economic injury level. |
| weedicides, |  |  |  |  |
| herbicides, |  | **P2.** | Identify different weeds and their control as per | **K2.** Evaluate the best control with suitable and recommended |
| fungicides |  |  | industry recommendations. | herbicides and pesticides. |
|  |  | **P3.** | Manage the rearing of beneficiary predators for | **K3:** Explain safe storage of pesticides etc |
|  |  |  | efficient biological control. |  |
|  |  |  |  | **K4:** Explain the record keeping procedures for handling |
|  |  | **P4.** | Demonstrate first aid and preventive measures | chemical sprays |
|  |  |  | dealing with any incident |  |
|  |  | **P5.** | Maintain the record of all chemicals used |  |
|  |  | **P6.** | Demonstrate safe use of spray kit and spray |  |
|  |  |  | tools and machines |  |