|  |  |  |  |
| --- | --- | --- | --- |
| Title | **Carry out land preparation and sowing of seeds** | | |
| Level | **3** | **Credits** | **9** |

|  |  |
| --- | --- |
| Purpose | These competency standards will ensure that the trainee will be able to prepare land for sowing of chili seeds using appropriate procedures. |

|  |  |
| --- | --- |
| Classification ISCED | 0811 Crop and livestock production |

|  |  |
| --- | --- |
| Available grade | Competent / Not yet competent |

|  |  |
| --- | --- |
| Modification history | N/A |

|  |  |  |
| --- | --- | --- |
| **Competency Unit** | **Performance Criteria** | **Knowledge & Understanding** |
| **B1**: Prepare the land as per required procedures including LASER land leveling and preparation of ridges | **Trainee will be able to:**  **P1.** Recognize different types of weeds and other unwanted materials in the field  .  **P2.**Select suitable means for removal of unwanted material in fields Manage weeds and other unwanted material using chemical and physical methods  **P3.**Evaluate physical conditions to determine the type and texture of soil  **P4.**Level land by using appropriate procedure  **P5.**Preparation of uniform ridges at recommended distances  **P6.**Calculate the size of the growing field for application of weedicide, fertilizer, pesticide etc. | **Trainee will be able to describe and explain: K1.**Ploughing to remove the debris of previous crop **K2.**Importance of removing weeds before sowing **K3.**Impact of weeds on productivity  **K4.**Land levelling with and without laser leveller  **K5.**Importance of levelling and merits and demerits of using laser leveller  **K6.**Importance of ridge formation in the field.  **~~K7.~~**Importance of maintaining appropriate ridge-to-ridge and plant-to-plant distance keeping in view the variety, soil and water availability.  **K8.**Impact of altering plant to plant and row to row distances as per SOPs advised by agricultural experts  **K9.**Land preparation by appropriate plough by use of machinery like tractor, cultivator, mould board etc. |
| **B2:** Sow the seeds either by direct | **Trainee will be able to:**  **P1.** Select the method for the sowing of seeds (direct | **Trainee will be able to describe and explain:** |

|  |  |  |
| --- | --- | --- |
| seeding or through nursery transplantation | seeding or nursery transplantation)  **P2.**Sow the seeds properly in case of direct seeding  **P3.**Select the site for nursery  **P4.**Prepare the nursery beds using appropriate distances  **P5.**Cover the seed with appropriate material and procedure  **P6.**Showering the nursery at suitable intervals e.g. 3-4 days  **P7.**Maintenance of nursery plants for transplantation  **P8.**Recognize the emergence stage  **P9.**Recognize the stage for the saplings to be transplanted from the nursery to the growing field  **P10.**Uproot unhealthy saplings from the nursery after a suitable period e.g. 2weeks  **P11.**Uproot and transplant the saplings from nursery in the main field | **K1.**Merits and demerits of direct seeding and nursery transplantation  **K2.**Calculating the seed requirements sowing rates for nursery and for direct seeding  **K3.**Differentiate between sowing through direct seeding or transplantation  **K4.**Precautions during seed sowing **K5.**Development of nursery properly **K6.**Maintenance of the nursery plants  **K7.**Method of transplantation of seedlings to the field  **K8.**Precautions during transplantation |
| **B3 :** Check, perform and maintain the irrigation of crop | **Trainee will be able to:**  **P1.** Select the appropriate irrigation system on the basis of availability, water quality (e.g. pH, hardness, SAR,TDS etc )  **P2.**Draw water sample for pH, hardness and TDS testing- for complete water analysis required for | **Trainee will be able to describe and explain: K1.**Different irrigation systems  **K2.**Suitable irrigation system for chilli production  **K3.**Check the performance of available irrigation system |

|  |  |  |
| --- | --- | --- |
|  | irrigation purpose  **P3.**Determine hardness of water for irrigation  **P4.**Check the irrigation system  **P5.**Irrigate the land by adapting suitable procedures  **P6.**Managing irrigation intervals as per crop requirement  **P7.**Managing the unsuitable water using appropriate procedures | **K4.**Adaptation of recommended procedures to irrigate the crop  **K5.**Importance of proper irrigation system to chilli crop **K6.**Knowledge about irrigation management **K7.**Impact of suitable frequency of irrigation  **K8.**Determination of the crop requirement for irrigation according to the condition of the crop |