| विषय: विषादी निरिद्या करों गालिय |
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| भिति : २०८०।०८। ११ गति सीमवार बेलुका ४:१५ वर्ने |
| स्थान : कृषि स्यूचना तथा प्रशिचाण केन्द्र, हिरहर्भवन |
| अह्यसाता : अरिप्रकार कुमर सन्वील प्रामुख (पाठ्यक्रम समिति , संग्रीजक) |
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| अवस्थातः । अभार मुन्जेल, प्रमुख, कुषि सूच्ना तथा प्रशिक्षण केन्द्र |
| प्रकार प्रकाश राज विष्ट , व. कु. प्र. अ , कु. स्त. प्र. के |
| 111 11 अ) रिजेन्युकुमार मलले , व.क. प्र. अ. क. स्. प्र. के |
| क्रि भी लालकुमार भेष्ठ, ठ.कु.अ.वि. कृषि तथा पशुपन्ही विकास मन्त्राल |
| ्राष्ट्रिकी महिरा आयार्य, व वा सं अ, खा क्वा वि . व्य केन्द्र |
| मुण्याम्का भी मनील परिवरेल, व.वा सं अ, ला. क्वा . वि. ० य-केन्द्र |
| क्रिक की राजिवयस राजमणारी, नि. प्रमुख केन्द्रीय कृषि प्रयोगशाला |
| _ श्री उत्तम आचार्य, विदेशक, तैपाल प्रशासनिक प्रशिक्षण प्रतिकाः |
| — डा. चन्द्र voolm, a.u.वि. उप, पशु सेवा विभाग |
| ते हा पर्वा की की इराला , WHD |
| अत्मी डा साविना कोइराला, WHD |
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| प्लाण्ट क्वीइटाइत तथा विषायी व्यवस्थापत केन्द्रकी मिति प्रotoluis |
| न्य तं वव की प्रभार्फत अतुरीध शर्ड प्राप्त विषायी निरीक्षककी हर |
| कार्य विमे वालिम पाष्ट्रयक्त्रम दलकल गरी प्रतिमार्जन सहित तपरिपल |
| बमीडिमकी तालिम पाष्ट्रयक्त स्वीकृत गाँत निर्णय गारियी |
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Training Curriculum

Training Title: Training for Pesticide Inspectors

Training Duration: 6 Days

Training objectives: By the end of the training the participants will be able to

- · Understand the history, evolution of pesticides and its classification.
- Explain the different types of pesticide formulations along with their merits and limitations.
- · Understand pesticides' short- and long-term effects on human health and the environment and the ways to minimize their impact with alternative solutions.
- · Perform the duties of pesticide inspectors.
- · Be familiar with national laws and international conventions, treaties, and intergovernmental organizations in the pesticide management
- · Reduce the mishandling of pesticides.
- · Identify the relevant stakeholders related to pesticide management and enhance their communication and coordination skills with them
- · Explain the Code of Conduct for pesticide management at different levels

Target group: Pesticide Inspector (Officer level)

Class per day: 4

Class Duration: 90 minutes

| S.N | Day | Session Topic | Sub-topic | Delivery methods | Session | |
|-----|-----|--|---|---|---------|----------|
| | | | | | Theory | Practica |
| 1 | | History and evolution of pesticides | Introduction of pesticides History of pesticides (global and national perspectives) Crop loss/havoc examples due to pests (global and national perspectives) | Interactive Lecture PowerPoint presentation Video play | 1 | |
| 2 | | Classification of the pesticides | Types of pesticides based on: target pests, chemical composition, mode of action, environmental perspective, WHO classification by hazards, LD ₅₀ | Interactive Lecture PowerPoint presentation Sample demonstration | 1 | |
| 3 | 1 | Formulation of pesticides | Concept and importance of pesticide formulation, Types of pesticide formulation including new generation, Advantages and disadvantages of different types of pesticide formulations | Interactive Lecture PowerPoint presentation Sample demonstration | 1 | |
| 4 | | Risk of pesticides and minimizing strategies | Risk/Hazards of pesticides (Pesticide use, overuse, misuse), Mode of entry, Route of pesticides entry in the human body, Various non-agricultural uses of pesticides its potential risks and remedies, Strategy/ways to minimize the impact on human health | Brainstroming, Interactive Lecture PowerPoint presentation Photo sheet display | 1 | |
| 5 | | Assessment of impact of pesticides on human health and first aid measures | Self-surveillance of pesticide poisoning by use of Blacklight, UV light Common presentation of personnel with mental health condition having risk of intentional misuse Suicide risk assessment and co-ordination for care Acute (Accidental and incidental) and chronic toxicity Signs and symptoms of pesticide exposure • First aid measures and referral co-ordination following pesticide exposure | PowerPoint presentation Roleplay -Pesticide retailer and buyer two different scenario -Farmers coming to buy pesticide -Teenager/ Person with Mental health problems buying pesticide | 1 | 1 |



| S.N | Day | Session | Sub-topic | Delivery methods | Session | |
|-----|-----|--|--|--|---------|----------|
| 5.N | Day | Topic | Sub-topic | Denvery methods | Theory | Practica |
| 6 | 2 | Pesticide use and effects on the environment | Effect of pesticides in agro-ecosystem and environment, Bioaccumulation and bio magnification, Pest resistance to pesticide, pest resurgence and secondary pest outbreak, Short- and long-term effects of highly hazardous pesticides and Persistent Organic Pollutants (POPs) | Interactive Lecture PowerPoint presentation Reference manual | 1 | |
| 7 | | Safe use, transportation and storage of pesticides | Safe use: -Selection of pesticides, doses, frequency (application interval), timing, method of use, reentry interval (REI), pre-harvest interval (PHI), pesticide resistance Use of PPE Transportation, storage and safe handling of pesticides after leakage and breakage | Interactive Lecture PowerPoint presentation Participatory Discussion Practical Demonstration | 1 | |
| 8 | 3 | International provisions related to pesticide management | FAO/WHO guidelines -Basel Roterdam Stockholm (BRS), Minamata, SAICAM, Montreal, Convention on Biodiversity (CBD) -International code of conduct on pesticide management -FAO tool kit | Interactive Lecture PowerPoint presentation Internet surfing | 1 | 1 |
| 9 | | National legal provisions on pesticide | Pesticide Management Act, 2019, Registration process of pesticides and licensing, Pesticide regulation, directives, guidelines -Other relevant laws and regulations related to pesticide - Pesticide label and its role in pesticide management. | Interactive Lecture PowerPoint presentation Photo sheet display. | 2 | |
| 10 | 4 | Roles and responsibility of pesticide | Roles, responsibility and power of pesticide inspector - legal provisions and cross-cutting issues -Provision regarding offense, Punishment, Investigation of filling case, Compensation, -Challenges faced by pesticide inspectors | Interactive Lecture Role play Case study | 1 | |
| | | inspectors | Mock drill test for law enforcement | Field visit, Muchulka and paperwork, and group discussions /feedback | | 2 |
| | | Obsolute Pesticide Management | Legal provision Date expired pesticide Leakage/Breakage/Spillage Banned pesticide Disposal of pesticide containers and pesticides | Lecture Power point Presentation | 1 | |
| | | Noble practices of pest management, | IPM: Concept, definition, principles and approaches (Bio rational, microbial pesticides, bio pesticides, lures/ traps, Predators, Parasitoids) Indigenous methods of pest management, Introduction and use of nuclear technology (Radiation, beam light, Gamma rays, etc.) | Interactive Lecture PowerPoint presentation Participatory Discussion Practical Demonstration | 2 | |





| S.N | Day | Session | Sub tents | Delivery methods | Session | |
|-----|-----|--|--|--|---------|----------|
| | | Topic | Sub-topic Sub-topic | Delivery methods | Theory | Practica |
| 10 | 5 | | -Concept of Whole Farm Approaches, Good Agriculture Practices (GAP), Organic Agriculture, Permaculture Concept on economic thresholds level and economic injury level, Agro-Ecosystem Analysis (AESA) | | 2 | |
| 12 | | Coordination and stakeholder engagement | Coordination with different stake holders:government, non- government, private, community and individuals, Gap analysis and its resolution | Brain storming, Group Work Interactive Lecture PowerPoint presentation Participatory Discussion Exercise | 1 | |
| 13 | 6 | Communicati on and Facilation skills | Introduction, Importance, Methods of Good Facilitation | Brain storming, Interactive Lecture PowerPoint presentation Participatory Discussion Exercise/ Role play | 1 | |
| 14 | | Recod Keeping and Reporting | Existing practices and their applicability Regulatory Actions Inspection report Suicide and self harm by misuse of pesticides | Format development Participatory Discussion | 1 | |
| 15 | | | Pesticide consumption data collection, analysis and reporting | Format development Participatory Discussion | 1 | |
| - | | | Total technical classes | | 20 | 4 |