

**APPPC Regional Workshop on Code of Conduct on Pesticide Management  
26-30 January 2015, Kathmandu, Nepal**

**Summary Report**

**Summary**

The workshop took place in Kathmandu, Nepal from 26-30 January 2015 and was attended by 28 participants from 12 Asian countries. The purpose of this workshop was to strengthen pesticide management capacities and to assist countries to address their obligations under the *Code of Conduct* and also the Rotterdam Convention.

The workshop provided training on all chapters of the Code and the associated technical guidelines. Fruitful exchanges among the delegates clarified issues and pointed to areas that need special attention. Participants became familiar with the new definitions, a comprehensive approach to pesticide management, the concept of life-cycle management, the new GHS labeling system, and the reporting obligations under the Code. Exchanges among the countries developed a clearer picture of the regional status of several important pesticide management issues such as registration decision making, information sharing, availability of local data for risk assessment, disposal of used pesticide containers, etc. The participants were provided with training materials and tools so that they could act as master trainers on the amended *Code on Conduct* in their respective countries.

In addition the workshop provided training on reporting obligations under the Rotterdam Convention such as import responses and notification of final regulatory action, as well as reporting health or environmental incidences with severely hazardous pesticide formulations (SHPF). Participants increased the understanding of the mechanism under the Rotterdam Convention and how countries could protect themselves from the import of unwanted pesticides. In addition, they learned how to report health and environmental incidences for SHPF and why it is important for developing countries to report these.

Furthermore, participants exercised filling a regular monitoring report on compliance of the Code and considered possible country actions for the implementation of the provisions of the Code in their respective countries and for training concerned parties in their countries on the new elements in the Code. As a result participants had an opportunity to assess the status of pesticide management in their country and identify gaps and areas of improvement. This helped them with identifying priority areas for possible actions for their country.

As a result, the capacity of participants have been improved with regard to:

- provide training on the new *Code of Conduct* to stakeholders in their respective countries;
- prepare regular and ad-hoc reports on the monitoring and observance of the Code;
- prepare reports on health and environmental incidents resulting from exposure to pesticides;
- prepare import responses and notifications under the Rotterdam Convention;

- follow up on work plans for the implementation of the *Code of Conduct*, international conventions and harmonization guidelines.

Delegates discussed and adopted the following recommendation to be considered by the participating countries:

- Translate the revised Code of Conduct and related training and reference materials into the local language;
- Inform all stakeholders about the provisions of the new Code of Conduct and the principles and ethics expressed in it;
- Collect information for a potential country pesticide management report following the outline of the Regular Monitoring Report and the information collected through the pre-workshop questionnaire;
- Bring to the attention of concerned parties the reference materials, technical guidelines and tools related to the Code of Conduct;
- When amending pesticide legislation or regulations, explore possibilities of including the specific articles which have been addressed in the new code such as public health/vector pesticide management, information exchange, disposal, etc.;
- Collect and compile information related to :
  - a. registered pesticides
  - b. pesticides of concern (severely restricted; banned; HHP; SHPF; as well as candidate chemicals for Annex III)
- Exchange among countries samples of official certificates (registration, export) and labels, and review import requirement;
- Review status of import responses for Annex III chemicals and submit/update them to the Secretariat of the Rotterdam Convention, and implement at national level;
- Cooperate with selected countries on issues of common concern such as risk analysis, quality control, information exchange, registration of bio-pesticides, etc.



# **Report of the APPPC Regional Workshop on Code of Conduct on Pesticide Management**

**26-30 January 2015, Kathmandu, Nepal**

## **WORKSHOP GOALS AND OBJECTIVES**

The purpose of this workshop was to strengthen pesticide management capacities and to assist countries to address their obligations under the *Code of Conduct* and also the Rotterdam Convention.

More specifically, the objectives of the workshop were to:

- raise awareness on the new provisions in the amended *Code on Conduct* (e.g. new or revised definitions, life-cycle management, GHS, reporting formats, etc.);
- share experiences with the life-cycle management of pesticides, including the disposal of used pesticide containers, information sharing, etc.;
- provide guidance for the development of a reporting system for health and environmental incidents resulting from exposure to pesticides;
- provide guidance for regular and ad-hoc monitoring reports on the observance of the *Code of Conduct*;
- follow-up on the national obligation under the Rotterdam Convention on the submission of import responses for Annex III chemicals and notification of the Final Regulatory Actions by countries that are Parties to the Convention;
- follow-up on the ratification of the Rotterdam, Stockholm and Basel Conventions;
- share experiences with the implementation of the Rotterdam Convention in the Asia-Pacific region;
- assess the progress on the implementation of the Harmonization Guidelines and the work plans under the FAO TCP.

These workshop objectives were in line with FAO's Strategic Objective 2 insofar they support pesticide risk reduction, sustainable intensification and the implementation of international standards and guidelines. The workshop built capacity to implement these objectives.

In preparation for the workshop, a questionnaire survey was conducted to collect information on the current status of pesticide management in the respective countries, including the implementation of the provisions under the Code of Conduct and international conventions. This allowed determining the degree of conformity in policy, legal and technical areas and served as the foundation for identifying gaps and developing country work plans for the next steps. Furthermore, lists of banned, restricted and registered pesticides were collected to update existing regional data sets.

The workshop was divided into three parts:

- (1) Familiarization with the new *Code of Conduct on Pesticide Management* and its technical guidelines and tools;
- (2) Implementation issues related to the Rotterdam, Stockholm and Basel Conventions;
- (3) Follow up on regional harmonization of pesticide regulatory management.

After the workshop, delegates were expected to :

- provide training on the new *Code of Conduct* to stakeholders in their respective countries;
- prepare regular and ad-hoc reports on the monitoring and observance of the Code;
- prepare reports on health and environmental incidents resulting from exposure to pesticides;
- prepare import responses and notifications under the Rotterdam Convention;
- follow up on work plans for the implementation of the *Code of Conduct*, international conventions and harmonization guidelines.

## **OPENING SESSION**

The opening session was chaired by Dr. Vdaya Chandra Thakur, Secretary, Ministry of Agricultural Development. Welcome addresses to the delegates and guests were delivered by the FAO Country Representative, Dr. Somsak Pipoppinyo, the Secretary of the Asia-Pacific Plant Protection Commission (APPPC) and Senior FAO Plant Protection Officer, Dr. Yongfan Piao, the Director General of the Department of Agriculture, Dr. Yuwak Dhowaj and the Programme Director of the Plant Protection Department of Nepal, Dr. Dilli Ram Sharma. The speakers expressed their thanks to the organizers of the meeting and to the Government of Nepal for hosting this regional workshop.

The meeting was opened with the inaugural address given by the Hon. Minister of Agricultural Development, Mr. Hari Prasad Parajuli. He emphasized the high importance of agriculture for the economic and social development of Nepal, and the role of integrated pest and pesticide management for achieving sustainable food security without harming the environment and compromising people's health.

To introduce the topic of the workshop, Dr. Gerd Walter-Echols presented the summary and highlights of the questionnaire results. For managing pesticides, there is a need to understand the full life cycle of these products and how they are used by the farmers. Government policies play an important role in influencing their judicious use and minimizing adverse effects to human health and the environment.

The opening ceremony concluded with a group photo of all delegates and guests.

## **INTRODUCTION - NEW INTERNATIONAL DEVELOPMENTS**

### *International Code of Conduct on pesticide management*

Since its first adoption in 1985 by the FAO Conference of Parties, the *International Code of Conduct on the Distribution and Use of Pesticides* has been revised several times. The latest

revision was approved in 2013 by FAO and WHO under the new name *Code of Conduct on Pesticide Management*, and for the first time it covered both agricultural and public health pesticides.

The Code of Conduct is a voluntary standard for all aspects of pesticide management and serves as a point of reference for governments, pesticide industry, public interest groups and farmer organizations. It considers pesticide management as an integral part of chemicals management as well as of sustainable agricultural development.

The main changes in the new version are:

- Inclusion of public health pesticides and Integrated Vector Management
- Updated definitions
- More emphasis on health and environment
- Introduction of GHS for classification and labeling
- Several minor text changes to better align with new developments
- Change of title to reflect life-cycle approach

In support of the Code of Conduct, an extensive set of technical guidelines and tools have been developed by the FAO/WHO Joint Meeting on Pesticide Management. These provide more detailed guidance on specific areas of the Code of Conduct, such as legislation; policy; registration; compliance and enforcement; distribution and sales; use; application equipment; prevention and disposal of obsolete stocks; post registration surveillance; and monitoring observance of the Code.

To implement the Code of Conduct, governments are advised to introduce the necessary policy and legislation for the regulation of pesticides, their marketing and use throughout their life cycle, and make provisions for its effective coordination and enforcement, including the establishment of appropriate educational, advisory, extension and health-care services, using as a basis FAO and WHO guidelines and, where applicable, the provisions of relevant legally binding instruments. In so doing, governments should take full account of factors such as local needs, social and economic conditions, levels of literacy, climatic conditions, availability and affordability of appropriate pesticide application and personal protective equipment.

Governments are also advised to facilitate the exchange of information for cases of counterfeit and illegal pesticides being traded and for poisoning and environmental contamination incidents. They should also support the process of information exchange and facilitate access to information on matters including pesticide hazards and risks, residues in food, drinking water and the environment, the use of pesticides in or on non-food products, IPM/IVM, pesticide efficacy, alternatives to highly hazardous pesticides and related regulatory and policy actions.

The Code of Conduct supports FAO's Strategic Objective 2 of increasing and improving the provision of goods and services from agriculture, forestry and fisheries in a sustainable manner. It aims at making agriculture more sustainable by increasing productivity while using fewer expensive inputs such as pesticides. In addition, the Code helps design better policies and regulatory frameworks that promote food security while protecting human health and the environment.

### Rotterdam, Stockholm and Basel Conventions: global and regional highlights

The Secretariat of the Rotterdam Convention presented the global and regional highlights, especially the upcoming COPs of the Basel, Rotterdam, and Stockholm Conventions. An important upcoming global event will be the Conference of Parties in Geneva, Switzerland in May 2015. In preparation for that meeting, a regional preparatory meeting will be held in Jakarta, Indonesia, in March 2015. On the agenda of the meeting will be the possible introduction of new chemicals for inclusion in the Rotterdam and Stockholm Conventions, as well as new technical guidelines on E-Waste, POP-waste and mercury waste for the Basel Convention. The status of ratification and implementation in the region, the actions to be taken were introduced. Detailed report of import responses of each country was distributed with the requests that countries to submit the missing ones as soon as possible and to update existing ones if necessary. Most APPPC countries have ratified all three conventions. With regard to the implementation of the Rotterdam Convention, a number of regional countries have not yet submitted all import responses for the 47 chemicals in Annex III which would protect them from unwanted imports of these chemicals through the PIC procedure. Only two countries, Malaysia and Thailand, have submitted Notifications of Final Regulatory Actions.

### Update on international and regional developments

Over the past 30 years, the FAO Regional Office for Asia and the Pacific has assisted countries in the region with managing pesticides in accordance with the *Code of Conduct* and other international conventions and treaties. These efforts were closely coordinated with the Asia-Pacific Plant Protection Commission (APPPC) for which the FAO Regional Office also provides the secretariat.

In 2005, a regional workshop on *Implementation, monitoring and observance of the International code of conduct on the distribution and use of pesticides* was organized. It included a questionnaire survey that produced country profiles on the status of pesticide management and the implementation of the Code. Subsequently, more comprehensive *Plant protection profiles from Asia-Pacific countries* were published in 2007 and were updated in 2009 and 2011 to provide accurate and structured tables and lists for an efficient and transparent exchange of critical information on laws, infrastructure and activities related to all aspects of plant protection, including pesticide management.

To promote greater pesticide regulatory harmonization, FAO implemented from 2009 to 2011 a project under its Technical Cooperation Programme (TCP) titled *Assisting countries in Southeast Asia towards achieving pesticide regulatory harmonization*. Among other, the project produced a set of guidelines which were published under the title *Guidance for harmonizing pesticide regulatory management in Southeast Asia*.

As a follow-up to the harmonization project, a regional workshop on *Enhancement of regional collaboration in pesticides regulatory management* was held in 2012 in Chiang Mai, Thailand. The workshop reviewed the national pesticide regulatory management systems considering the recommendations in the revised *International Code of Conduct* and the five harmonization guidelines that were developed for Southeast Asia under the TCP project.

To help countries, particularly those with limited resources, to phase out pesticides with unacceptable risks to human health and/or the environment, a regional workshop on *Practical aspects of pesticide risk assessment and phasing out of highly hazardous pesticides* was organized in Nanjing, China, in May 2014. The output of this workshop included regional data sets on registered and banned/restricted pesticides.

## **PART I - CODE OF CONDUCT ON PESTICIDE MANAGEMENT**

A series of training sessions were held to familiarize the workshop participants with the contents of the various articles of the Code and the changes with regard to the previous version. In addition, information was provided on technical guidelines and other tools that are available in support of the Code. This was followed by presentations of the questionnaire responses to the various topics which lead to clarifications and discussions on issues of common interest and concerns.

### *Pesticide legislation and policy*

These topics are covered by Article 3 on Pesticide Management and Article 5 on Reducing Health and Environmental Risks. The Code stresses the need for a single legislation that regulates the entire life cycle of all types of pesticides with the goal of reducing health and environmental risks. Specific guidelines exist for legislation and policy development, as well as for efficacy evaluation of plant protection products. Some countries in the region have already consolidated the management of all types of pesticides in the hands of a single regulatory agency. The legislation in most countries covers the entire life cycle. However, there are big differences between the countries with regard to their capacities for operating a registration scheme, implementing IPM and bio-control programmes, managing pest resistance, enforcing regulations or monitoring product quality or pesticide residues. Few countries use policy instruments such as special taxation, subsidies or fast-track registration to encourage the availability and use of low-toxic pest control products.

### *Pesticide registration*

Article 6 of the Code covers the regulatory and technical requirements for pesticide management and stresses the need for regional harmonizing. All countries in the region have already established pesticide registration schemes. The final decision on registration is either taken by a board of independent experts, a technical committee, the head of the registration unit or the minister itself. The period of registration validity varies widely from 2 years to unlimited. All countries have banned certain pesticides or have severely restricted their use. There are still significant differences among the countries with regard to which products require a registration. The general procedures for evaluating registration data dossiers are largely harmonized, but significant differences exist for risk assessment and making risk-benefit analyses.

### *Compliance and enforcement*

These topics are covered by Article 4 on pesticide testing in order to ensure a high quality of plant protection products. There are guidelines on quality control, compliance and enforcement,

as well as manuals for the development and use of FAO and WHO specifications on pesticides. While most countries have quality assessment and enforcement procedures, the ability to carry out enforcement actions varies greatly. A significant problem in many countries is the illegal trade with fake or counterfeit products. The control of such criminal activities requires joint efforts by various government departments and the industry. Essential are good communication channels so that problems in the field can be brought to the attention of the appropriate authorities.

### *Distribution and sales*

Article 8 of the Code deals with distribution and trade, and Article 11 with advertising. There are guidelines on tender procedures for the procurement of pesticides, for retail distribution and on advertising. While most countries follow the FAO guidelines and use licensing procedures to regulate import/export and retail of pesticides, only few countries have experience with issuing licenses for pest control operator. A number of countries allow the sale of identical products under different trade names which might confuse farmers and encourages excessive use. There are some notable efforts for reducing the number of trade names for identical products. Not all countries were able to provide figures on the volume and value of pesticide trade in their country.

### *Use and application equipment*

Article 7 of the Code deals with availability and use of pesticides and encourages countries to restrict availability of highly hazardous chemicals. There are guidelines on personal protection and good practices on ground and aerial applications. Numerous guidelines exist for the testing and certification of application equipment and applicators, however, only one country in the region has a certification scheme for application equipment. All countries provide training programmes on the use of personal protective equipment or have measures to restrict the use of pesticides to certain uses or users.

### *Labelling, packaging, storage and disposal*

These topics are covered in Article 10 of the Code. The guidelines on good labelling practices are under revision to incorporate the GHS standards. Various guidelines and tools exist on the prevention and disposal of obsolete stocks of pesticides which are a serious problem in many countries of the region. Some countries have completed their inventory of outdated pesticides, but few countries have incineration facilities for final disposal. Some countries are hampered by inventory regulations which prevent the writing-off of obsolete stocks. More efforts involving a broad coalition of political decision makers and involvement of various ministries are necessary to tackle this problem and to clean up pesticide stockpiles.

### *Post registration surveillance and information exchange*

Article 9 of the Code deals with information exchange on national and international level as an essential element for a broad based implementation of the Code. An older guideline exists for post-registration surveillance, while some recent guidelines have been developed for developing



a reporting system for health and environmental incidents and for the prevention and management of pesticide resistance. Furthermore, there are also useful recommendations from the regional TCP project on regulatory harmonization. The questionnaire results showed that most countries have established monitoring and reporting systems, but not all are yet functioning and producing regular reports. Residue monitoring capacities vary greatly among the countries dependent on their laboratory capacities. Very few information seems to be collected on environmental incidences and poisoning cases. Fewer than half the countries had any published reports to share.

### Monitoring and observance of the Code

Since 2003, monitoring the observance of the Code has been laid out in Article 12. It calls on all concerned parties to monitor the observance of the Code and report every three years to FAO. The guidelines on monitoring and observance of the Code of Conduct contain formats for regular monitoring reports and *ad-hoc* monitoring reports. However, no country appears to have yet submitted a report. Likewise, many countries also lack behind their reporting obligations under the Rotterdam Convention.

### Conclusion

This part of the workshop trained all participants of the content, principles and ethics of the Code. Participants became familiar with the new definitions, a comprehensive approach to pesticide management, the concept of life-cycle management, the new GHS labeling system, and the reporting obligations under the Code. Exchanges among the countries developed a clearer picture of the regional status of several important pesticide management issues such as registration decision making, information sharing, availability of local data for risk assessment, disposal of used pesticide containers, etc. Finally, the participants were provided with training materials and tools so that they could act as master trainers on the amended *Code on Conduct* in their respective countries.

## **PART II - ROTTERDAM CONVENTION**

### Hands-on training

As part of the workshop, practical training was facilitated by Ms. Yun Zhou from Rotterdam Convention Secretariat on several provisions of the Rotterdam Convention. Participants reviewed the form for import response and the Decision Guidance Document (DGD). Then they carried out an exercise of completing an import response form for a case example of monocrotophos. Participants also reviewed and example of the PIC Circular and discussed possible follow-up actions at national level.

For reporting a severely hazardous pesticide formulation (SHPF), participants reviewed the SHPF form, and based on a case study example, completed the form. There are two standard forms available for human health incidents and environmental incidents. Each form has two sections: Part A is the transmission form to be completed by the DNA; Part B is used to report on

the incident. Following the exercise, participants discussed experiences in identifying and collecting information on pesticide poisoning incidents.

Further guidance was provided for notifications on final regulatory actions on banning certain pesticides, as well as for export notifications in cases that a non-Annex III pesticide that is banned in the country of origin is shipped to a developing country. The importing country has to respond within 30 days.

### *Sustainable alternatives to endosulfan*

The Secretariat of the Rotterdam Convention also plays a role in disseminating solutions when a pesticide has been internationally banned. For example, when endosulfan was listed by the Rotterdam and Stockholm conventions in 2011, alternative pest management options were needed, especially for coffee and cotton. The Secretariat responded by bridging existing knowledge to the farming communities that were looking for alternatives. In the project on growing coffee without endosulfan, the Secretariat collaborated with PANUK and the 4C Coffee Association to collect information on alternative pest management practices and to disseminate these to the larger coffee producing community. In this example, four videos were produced on cultural control options, the use of bio-pesticides and trapping, as well as on monitoring and decision making. With the new knowledge, farmers were able to discontinue their use of endosulfan without higher cost and without any loss of quality. This example showed that in order to help farmers to move away from endosulfan in coffee, policy and technical support was needed.

### *Conclusion*

The practical training provided in this part of the workshop increased the understanding of the mechanism under the Rotterdam Convention and how countries could protect themselves from the import of unwanted pesticides. The country delegates are now in a better position to facilitate the issuance of Import Response for Annex III chemicals and notifications of Final Regulatory Actions. In addition, they learned how to report health and environmental incidences for SHPF and why it is important for developing countries to report these.

## **SESSION III - FOLLOW-UP**

### *Regular monitoring report for the Code of Conduct*

Since the questionnaire results showed that no country has yet submitted a Regular Monitoring Report, a practical exercise was conducted whereby each workshop participant filled out a report form with the information that they had already submitted as part of the questionnaire survey. At the end of the exercise, only 3-4 participants said that they had no problems with filling out all questions, while others said that they had not enough knowledge and needed to consult other government departments. This reflects the level of sophistication and available resources of the various registration systems. For example, China already issues annual reports on pesticide management that contains most of the information requested in report form. On the other hand,

many countries with fewer resources there are multiple departments involved in pesticide management which often have little exchange of information. With regard to the report format, some participants found that some yes/no choices did not apply and more differentiated answers were required.

### Candidate chemicals for Annex III

The list of chemicals that were to be considered as candidates for inclusion in Annex III of the Rotterdam Convention were presented by Ms. Zhou. These chemicals did not yet require an import response. A country-by-country feedback showed that many of these chemicals are already banned or not registered in a number of Asian countries.

### Chinese pesticide management certificates

Examples of the Chinese pesticide registration certificate and export certificate were presented and all elements on the forms were explained by Ms Zhang Wei from China. This exercise helped those countries that import pesticides from China to understand the certification system and how they could check whether a pesticide is legally registered in China.

### Country action plans

Each country delegation was asked to self-assess the status of compliance with the provisions of the Code of Conduct and to suggest steps towards a full implementation of the Code. Furthermore, they were invited to exercise preparation of a 2-3 year action plan that might include training of other stakeholders in the country about the provisions of the Code, or facilitating the official submission of a Regular Monitoring Report. Some of the participating countries showed a great awareness of the principles expressed in the Code and were highly motivated to work towards an increased observance of the Code in their countries.

### Conclusion

Through reviewing the Regular Monitoring Report and filling out its various parts, the participants had an opportunity to assess the status of pesticide management in their country and identify gaps and areas of improvement. This helped them with identifying priority areas for an action plan for their country. Several action plans included translating the text of the Code into the local language and subsequent training of local stakeholders on the provisions of the Code. Other country action plans proposed the strengthening of monitoring activities of pesticide quality, poisonings and environmental incidences. It was reported that some countries were planning to revise their pesticide legislation and regulations, and this provided a good opportunity to include strengthening the observance of the Code. The presentations contained many good suggestions which might be taken up by other delegates when revising their action plans. It was emphasized that strengthening the observance of the Code does not necessarily require new equipment and laboratories, but foremost active and concerned persons who are willing to bring the principles of the Code to the awareness of all stakeholders.

During the final session of the workshop, delegates discussed and adopted the following recommendation to be considered by the participating countries:

- Translate the revised Code of Conduct and related training and reference materials into the local language;
- Inform all stakeholders about the provisions of the new Code of Conduct and the principles and ethics expressed in it;
- Collect information for a potential country pesticide management report following the outline of the Regular Monitoring Report and the information collected through the pre-workshop questionnaire;
- Bring to the attention of concerned parties the reference materials, technical guidelines and tools related to the Code of Conduct;
- When amending pesticide legislation or regulations, explore possibilities of including the specific articles which have been addressed in the new code such as public health/vector pesticide management, information exchange, disposal, etc.;
- Collect and compile information related to :
  - c. registered pesticides
  - d. pesticides of concern (severely restricted; banned; HHP; SHPF; as well as candidate chemicals for Annex III)
- Exchange among countries samples of official certificates (registration, export) and labels, and review import requirement;
- Review status of import responses for Annex III chemicals and submit/update them to the Secretariat of the Rotterdam Convention, and implement at national level;
- Cooperate with selected countries on issues of common concern such as risk analysis, quality control, information exchange, registration of bio-pesticides, etc.

## **FIELD VISIT**

On 29 January, a field trip was organized. The workshop participants visited the Kalimati wholesale market in Kathmandu, where in June 2014, a small laboratory for rapid bioassay for pesticide residues was established. Vegetable samples were being analyzed for their AChE properties which would indicate a presence of Organophosphate or Carbamate pesticide residues. An enzyme inhibition value of more than 45% would indicate that the sample was unfit for human consumption and based on a Government directive, the shipment was seized and destroyed. In the first month of operation, 14% of the samples taken showed excessive residues. Samples with marginal inhibition values of 35-45% were quarantined for a few days. Results over the past half year showed that the number of violations was drastically reduced to the effect that no more violations were detected in the past month. This shows an increased awareness among producers who became more careful with bringing produce to the market where the waiting period has not been observed. Over the same period, an increase in demand for organic vegetables was noticed.

Following the visit at the wholesale market, the workshop participants were driven about 50 km to Kushadevi in Kavre District where they visited an IPM Resource Centre that was established in 2013 by the National IPM Programme. This centre was operated by the local IPM farmer cooperative for the production of bio-pesticides, specifically entomopathogenic nematodes, *Trichoderma viride*, NPV and Metarhizium. In addition, the cooperative organized the marketing

of their IPM products in the nearby city of Banepa. The members continue with jointly testing and validating IPM technologies in the field and providing technical information to the farming community. There are plans to expand the production and marketing of bio-pesticides in the near future. This cooperative was an enlightening example of institutionalizing IPM at local level and efforts to make IPM economically sustainable.

## **CLOSING SESSION**

Dr. Yongfan Piao, Senior FAO Plant Protection Officer and Secretary of the Asia-Pacific Plant Protection Commission (APPPC) thanked the participants for their active participation and contributing their experiences during the discussions. It helped participants acquired information on final registration decision making process of countries, issues and challenges of illegal trade, disposal and application equipment certification, etc. The workshop succeeded in familiarizing participants with the articles of the Code and the many technical guidelines so that the delegates can bring the contents of the code to the attention of all stakeholders in their respective countries. Particularly valuable were the practical training on how to fulfil the reporting obligations under the Code and the Rotterdam Convention. Furthermore, the field visit underlined the importance of IPM and residue monitoring as an important approach to pesticide risk reductions. The presentations of the action plans for possible follow ups showed that many participants had developed a new understanding of pesticide management and were highly motivated to contribute to its proper implementation in their home countries. Strengthened cooperation among countries will be an important driving force for achieving progress in pesticide management at both country and regional levels. Finally, Dr. Piao thanked Mr. Dilli Sharma and the plant protection staff for the excellent organization of the workshop.

Some delegates joined the words of thanks and gratitude to the organizers and FAO, and the workshop was then closed by Mr. Dilli Sharma.

Timetable

	Arrival of Participants
<b>DAY 1</b>	
08:30-10:00	<u>Opening Session</u> <u>Chair by- Secretary, MoAD</u> <u>Chief Guest- Hon. Minister, MoAD *Introduction of participants( Delegates)</u> <ul style="list-style-type: none"> <li>➤ Welcome address- PD, PPD</li> <li>➤ Inauguration of the workshop- chief guest</li> <li>➤ Welcome address by Dr. Somsak Pipoppinyo, FAOR Nepal</li> <li>➤ Remarks and Introduction to the Workshop- Secretary of APPPC Dr. Yongfan Piao</li> <li>➤ Summary and highlights of questionnaire results - Mr. Gerd Walter-Echols</li> <li>➤ Address by- chief guest</li> <li>➤ Closing the opening session of the workshop - Chair</li> <li>➤ Group photo</li> </ul>
10:00-10:30	Coffee Break
10:30-12:30	<u>Session 1: New international and regional developments</u> <ul style="list-style-type: none"> <li>➤ Code of Conduct on Pesticide Management: Highlights, objectives and definitions</li> <li>➤ Updates on Rotterdam, Stockholm and Basel Conventions</li> <li>➤ Regional status of ratification of pesticide conventions</li> <li>➤ Update on recent international, regional and national developments</li> </ul>
12:30-13:30	Lunch Break
13:30-15:30	<u>Session 2: Pesticide legislation and policy</u> <ul style="list-style-type: none"> <li>➤ Main provisions, and changes in the Code Articles 3 Pesticide management and Article 5: Reducing health and environmental risks</li> <li>➤ Guidelines: <ul style="list-style-type: none"> <li>- Guidelines for legislation on the control of pesticides &amp; designing national pesticide legislation</li> <li>- Guidelines on pest and pesticide management policy development (2010); Guidelines on efficacy evaluation for the registration of plant protection products (2006)</li> </ul> </li> <li>➤ Tools: FAO Legislative study on designing national pesticide legislation (2007) FAOLEX legislative database</li> <li>➤ Regional status according to questionnaire survey</li> <li>➤ Exchange of experiences and discussion</li> </ul>
15:30-16:00	Coffee Break
16:00-18:00	<u>Session 3: Pesticide Registration</u> <ul style="list-style-type: none"> <li>➤ Main provisions and changes in the new Code Article 6: Regulatory and technical requirements</li> <li>➤ Guidelines <ul style="list-style-type: none"> <li>- Guidelines for the registration of pesticides (2010);</li> <li>- Guidelines on data requirements for the registration of pesticides (2013)</li> <li>- Guidelines on efficacy evaluation of plant protection products (2006)</li> <li>- TCP Regional guidelines: Registration data requirements, labelling, registration of biocontrol products</li> </ul> </li> <li>➤ Tools <ul style="list-style-type: none"> <li>- Manual on the submission and evaluation of pesticide residues data for the estimation of maximum residue limits in food and feed (2009)</li> </ul> </li> <li>➤ Regional status according to questionnaire survey</li> </ul>

	➤ Exchange of experiences and discussion
<b>DAY 2</b>	
08:30-10:30	<b>Session 4: Compliance and enforcement</b> <ul style="list-style-type: none"> <li>➤ Main provisions and changes in the new Code Article 4: Pesticide testing</li> <li>➤ Guidelines <ul style="list-style-type: none"> <li>- Guidelines for quality control of pesticides (2011)</li> <li>- Guidelines on compliance and enforcement of a pesticide regulatory system</li> <li>- TCP guidance for formulation analysis</li> </ul> </li> <li>➤ Tools: <ul style="list-style-type: none"> <li>- FAO/WHO pesticide specifications</li> </ul> </li> <li>➤ Regional status according to questionnaire survey</li> <li>➤ Exchange of experiences and discussion</li> </ul>
10:30-11:00	Coffee Break
11:30-12:30	<b>Session 5: Distribution and sales</b> <ul style="list-style-type: none"> <li>➤ Main provisions and changes in the new Code Article 8: Distribution and trade; Article 11: Advertising</li> <li>➤ Guidelines <ul style="list-style-type: none"> <li>- Guidelines on pesticide advertising</li> </ul> </li> <li>➤ Regional status according to questionnaire survey</li> <li>➤ Exchange of experiences and discussion</li> </ul>
12:30-13:30	Lunch Break
13:30-15:30	<b>Session 6: Use and application equipment</b> <ul style="list-style-type: none"> <li>➤ Main provisions and changes in the new Code Article 7: Availability and use</li> <li>➤ Guidelines <ul style="list-style-type: none"> <li>- Guidelines on personal protection when working with pesticides in tropical climates (1990)</li> <li>- Guidelines on good application practices (ground, arial 2001)</li> <li>- Guidelines on minimum requirements for agricultural pesticide application equipment (2001-2002)</li> <li>- Guidelines on organization and operation of training schemes and certification procedures for operators of pesticide application equipment (2001)</li> </ul> </li> <li>➤ Tools: <ul style="list-style-type: none"> <li>- The preparation of inventories of pesticides and contaminated materials (2010)</li> <li>- Environmental management tool kit for obsolete pesticides (EMTK)</li> </ul> </li> <li>➤ Regional status according to questionnaire survey</li> <li>➤ Exchange of experiences and discussion</li> </ul>
15:30-16:00	Coffee Break
16:00-18:00	<b>Session 7: Labelling, packaging, storage and disposal</b> <ul style="list-style-type: none"> <li>➤ Main provisions and changes in the new Code Article 10: Labelling, packaging, storage and disposal</li> <li>➤ Guidelines: <ul style="list-style-type: none"> <li>- Guidelines on management options for empty containers (2008)</li> <li>- Guidelines for the management of small quantities of unwanted and obsolete pesticides (1999)</li> </ul> </li> <li>➤ Tools: GHS labelling system</li> <li>➤ Regional status according to questionnaire survey</li> <li>➤ Country experiences with the disposal of used pesticide containers</li> <li>➤ Exchange of experiences and discussion</li> </ul>
<b>DAY 3</b>	
08:30-10:30	<b>Session 8: Post-registration surveillance and information exchange</b> <ul style="list-style-type: none"> <li>➤ Main provisions and changes in the new Code Article 9: Information exchange</li> <li>➤ Guidelines: <ul style="list-style-type: none"> <li>- Guidelines on developing a reporting system for health and environmental incidents resulting from exposure to pesticides (2009);</li> <li>- Guidelines on prevention and management of pesticide resistance (2012)</li> <li>- TCP guidance</li> </ul> </li> </ul>

10:30-11:00	<ul style="list-style-type: none"> <li>➤ Tools: Incidence reporting in the context of the Rotterdam Convention</li> <li>➤ Regional status according to questionnaire survey</li> <li>➤ Exchange of experiences and discussion</li> </ul>
11:00-12:30	<p>Coffee Break</p> <p><b>Session 9: Monitoring and observance of the Code</b></p> <ul style="list-style-type: none"> <li>➤ Main provisions and changes in the new Code Article 12: Monitoring and observance of the Code</li> <li>➤ Guidelines <ul style="list-style-type: none"> <li>- Guidelines on monitoring and observance of the revised version of the Code (2006)</li> </ul> </li> <li>➤ Tools: Regular monitoring and ad-hoc reporting formats</li> <li>➤ Regional status according to questionnaire survey</li> <li>➤ Exchange of experiences and discussion</li> </ul>
12:30-13:30	Lunch Break
13:30-15:30	<p><b>Session 10: The conventions and pesticide management</b></p> <ul style="list-style-type: none"> <li>➤ Alternatives to HHPs</li> <li>➤ Discussion and summary</li> </ul>
15:30-16:00	Coffee Break
16:00-18:00	<p><b>Session 11: Hands on training for the implementation of the Rotterdam Convention</b></p> <ul style="list-style-type: none"> <li>➤ Status of implementation in the region</li> <li>➤ Guidance and examples of import response</li> <li>➤ Practical guidance on reporting of pesticides poisoning incidences under the Rotterdam Convention</li> </ul> <p>Discussion and summary</p>
<b>DAY 4</b> Field trip	
<b>DAY 5</b>	
08:30-10:30	<p><b>Session 12: Regional Harmonization of Pesticide Regulatory Management</b></p> <ul style="list-style-type: none"> <li>➤ Summary of TCP activities and achievements</li> <li>➤ Progress with implementation of the Harmonization Guidelines and the work plans under the FAO TCP.</li> <li>➤ Country experiences and next steps</li> </ul>
10:30-11:00	Coffee Break
11:00-12:30	<p><b>Session 13: Preparation of Country Action Plans</b></p> <ul style="list-style-type: none"> <li>➤ Self-assessment of compliance with Code of Conduct (and regional regulatory harmonization where applicable)</li> <li>➤ Priorities and steps for way forward</li> </ul>
12:30-13:30	Lunch Break
13:30-16:30	<p><b>Session 14: Way forward for implementation of Code of Conduct</b></p> <ul style="list-style-type: none"> <li>➤ Presentations of country analyses and action plans</li> <li>➤ Discussion and summary</li> <li>➤ Revision of country action plans</li> </ul>
16:30-17:00	Coffee Break
17:00-18:00	<b>Session 15: Final discussion and adoption of -workshop-results</b>



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