



REPORT

4TH FAO/WHO JOINT MEETING ON PESTICIDE MANAGEMENT

and

**6TH SESSION OF THE FAO PANEL OF EXPERTS ON PESTICIDE
MANAGEMENT**

**5 – 8 October 2010
Geneva**



**World Health
Organization**



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Abbreviations

ASP	Africa Stockpiles programme
CAN	Comunidad Andina
CCPR	Codex Committee on Pesticide Residues
CILSS	Comité Sahélien des Pesticides
CiP	Chemicals in Products
CIPAC	Collaborative International Pesticide Analytical Council
COAG	FAO Committee on Agriculture
CoP	Conference of Parties
CRC	Chemical review Committee
CSD	UN Commission on Sustainable Development
DNA	Designated National Authority
EMS	Environmental Management Systems
EECCA	Eastern Europe, Caucasus and Central Asia countries
EU	European Union
FAO	Food and Agriculture Organization of the United Nations
GCC	Gulf Cooperation Council
GEF	Global Environment Facility
GIFAP	Groupement International des Associations Nationales de Fabricants de Produits Agrochimiques - International Group of National Associations of Manufacturers of Agrochemical Products
GHS	Globally Harmonized System of Classification and Labelling of Chemicals
GLP	Good Laboratory Practice
HHP	Highly Hazardous Pesticide
HQ	Headquarters
ICAC	International Cotton Advisory Committee
ICAMA	Institute for the Control of Agrochemicals – Ministry of Agriculture (China)
ICCM	International Conference on Chemicals Management
ICSC	International Chemical Safety Card
IGO	Inter-governmental Organization
IPCS	International Programme on Chemical Safety
IPM	Integrated Pest Management
ITN	Insecticide Treated mosquito Net
IVM	Integrated Vector Management

JMPM	FAO/WHO Joint Meeting on Pesticide Management
JMPR	FAO/WHO Joint Meeting on Pesticide Residues
JMPS	FAO/WHO Joint Meeting on Pesticide Specifications
MRL	Maximum Residue Limit
NGO	Non-governmental Organization
PAN	Pesticide Action Network
PHP	Public Health Pesticide
QSP	Quick Start Programme
SAICM	Strategic Approach to International Chemicals Management
SEA	South-East Asia
SECE	Scientific Expert Group on Chemicals and the Environment
SEEP	ICAC Expert Panel on Social, Environmental and Economic Performance of Cotton Production
SHPF	Severely Hazardous Pesticide Formulation
UN	United Nations
UNEP	United Nations Environment Programme
USA	United States of America
WB	World Bank
WHA	World Health Assembly
WHO	World Health Organization
WHOPES	World Health Organization Pesticide Evaluation Scheme

1. Introduction

The 4th FAO/WHO Joint Meeting on Pesticide Management (JMPM) and the 6th Session of the FAO Panel of Experts on Pesticide Management, were held at WHO Headquarters in Geneva, from 5 to 8 October 2010.

The FAO Panel of Experts on Pesticide Management is the official statutory body that advises FAO on matters pertaining to pesticide regulation and management, and alerts it to new developments, problems or issues that otherwise merit attention. The Panel in particular counsels FAO on the implementation of the revised version of the *International Code of Conduct on the Distribution and Use of Pesticides* (hereinafter “the Code of Conduct”). Members of the WHO Panel of Experts are drawn from the WHO Panel of Experts on Vector Biology and Control, or are academic or government experts invited to advise WHO on policies, guidelines and key actions to support Member States on sound management of pesticides.

Panel members invited to this meeting have been selected for their personal expertise and experience in specific aspects of pesticide management, both in agriculture and in public health, and do not represent the position of governments or institutions they may belong to. They are appointed in their personal capacity by either FAO or WHO. Both FAO and WHO Panel members are requested to declare any interests they may have which could affect their opinion or advice.

In addition to Panel members, representatives from Inter-Governmental Organizations (IGOs) and pesticide industry associations attended the meeting as observers.

Dr Morteza Zaim, Coordinator Vector Ecology and Management, on behalf of WHO, welcomed all FAO and WHO Panel members, representatives for IGOs and those from pesticide industry to the 4th Session of the JMPM. He informed the meeting that two WHO Panel members, Dr Tiina Santonen and Mr Somchai Preechathaveekid, would not be able to attend the present session. Dr Zaim thanked all participants for coming to Geneva and expressed his hopes for a fruitful and successful meeting.

Mr Mark Davis, Senior Officer Pesticide Management of FAO, welcomed participants on behalf of FAO. He expressed his appreciation to participants for making their time and expertise available to advise FAO and WHO on ways and means to improve pesticide management and reduce the risks of pesticide use in agriculture and public health.

All participants in the meeting are listed in Annex 1.

2. Opening of the meeting

Dr Lorenzo Savioli, Director of the WHO Department of Control of Neglected Tropical Diseases, in his opening address, welcomed participants of the JMPM to Geneva and expressed his pleasure to host the meeting at WHO Headquarters.

Dr Savioli noted that there is a growing understanding that management of pesticides, and chemicals in general, including those used in public health and for personal protection is still largely inadequate. In this respect, he welcomed the Resolution adopted by the 63rd World Health Assembly (WHA), held in May 2010, which urges Member States to establish or strengthen capacity for the regulation and sound management of pesticides and other chemicals throughout their life-cycle. The WHA also requested the Director-General of WHO to support the ongoing joint efforts of FAO and WHO in capacity building of Member States in the sound management of pesticides.

The Director underlined the importance of the recent survey on public health pesticide registration and management practices carried out by WHO in 113 Member States endemic or at risk of major vector-borne diseases. This survey showed, *inter alia*, that 72 percent of countries are aware of the Code of Conduct as guiding document for public health pesticide management, a considerable increase compared to several years ago.

Dr Savioli noted the cooperation between WHO and the Bill and Melinda Gates Foundation to strengthen pesticide management in selected countries, and stressed that much more advocacy at the highest political level is required to ensure sufficient funding and investment in this priority area of work. He underlined that Integrated Vector Management (IVM) is considered by WHO as the basic strategy for vector-borne disease control. Both IVM and sound public health pesticide management are highlighted in the first *WHO Report on Neglected Tropical Diseases*, to be launched shortly by the Director-General of WHO.

Finally, the Director thanked all participants for their contribution to the JMPM, and declared the 4th FAO/WHO Joint Meeting on Pesticide Management open.

3. Election of the chairperson and rapporteurs

Dr Gary Whitfield was elected Chairperson of the meeting, and Dr Irma Makalinao and Mr David Kapindula were appointed Rapporteurs.

4. Adoption of the agenda

A number of amendments were proposed to the provisional agenda:

- movement of the item *Declaration of interest*, under the item *Introduction of meeting procedures*;
- movement of item 9 in the provisional agenda, *Pesticide registration: a plan of action to assist countries in building capacity for pesticide registration*, to the item on *Selected FAO and WHO activities to strengthen pesticide management at the national level*;
- cancellation of item 15.1 in the provisional agenda, *Global report on health impacts of pesticide use in agriculture* (by Pesticide Action Network)
- inclusion of a presentation of a proposed survey on the use of FAO guidelines under *Any other matters*.

A request by CropLife International to include a presentation on *Principles of registration* was not acknowledged.

Two closed sessions were held as part of the JMPM, in which only Panel members but not observers participated; one at the start of the meeting to discuss, amongst other, terms of reference of the observers, and a second session at the end of the meeting to discuss the recommendations.

The definitive agenda was adopted as shown in Annex 2.

5. Declaration of interest

FAO and WHO received Declarations of Interest from all the Panel members participating in the 4th Session of the JMPM. The Secretariat of the JMPM reviewed the Declarations of Interest and concluded that no circumstances were disclosed that could give rise to a potential or reasonably perceived conflict of interest related to the subjects discussed in the JMPM.

6. Terms of reference

Because of the important role that observers to the JMPM have in the discussions and the work of the meeting, the Panel members felt it was appropriate to elaborate terms of reference for these participants, to complement those defined for the JMPM members. The JMPM therefore recommended in its previous session that FAO and WHO provide terms of reference for observers to the JMPM.

Panel members, in closed session, reviewed the draft terms of reference for observers elaborated by FAO and WHO and provided a number of comments and suggestions for amendments. The Panel members requested FAO and WHO to consider these suggestions when finalizing the terms of reference, and subsequently circulate them to the JMPM for information and make them available to observers of the JMPM, so that they apply for its next session.

7. Developments since the previous session of the JMPM

A summary was presented of some important developments with respect to pesticide management that had taken place since the 3rd Session of the JMPM in October 2009.

7.1 WHO

Dr Zaim informed the meeting of the major activities carried out by WHO on pest icide management since previous JMPM meeting.

Chemical Safety

WHO Chemical Safety has been engaged in the following activities relating to pesticide management since the previous meeting:

- an update to the *WHO Recommended Classification of Pesticides by Hazard* has been published. This publication, which updates the 2004 version, now takes into account the Globally Harmonized System of Classification and Labelling of Chemicals (GHS) in determining the acute toxicity of pesticides (see chapter 8);
- a project to raise awareness and promote actions to address health issues related to highly hazardous pesticides (Class Ia and Ib), as well as 9 other chemicals of major public health concern has been undertaken (see chapter 8);
- the development of *International Chemical Safety Cards* (ICSCs) has continued (see chapter 8);
- a *Human Health Risk Assessment Toolkit* has been developed with the aim of making international chemical risk assessment methodologies and information more readily accessible to countries, especially to developing countries. This toolkit was finalized during 2010. The toolkit consists of generic roadmaps for various stages in chemical risk assessment and links to risk assessment material developed by international organizations. The toolkit can be utilized in the risk assessment of pesticides and this has been illustrated in one of the case studies. The case study describes a fictional scenario in which a central African country conducts a risk assessment to determine if regulatory action is needed to restrict the use of a pesticide thought to be responsible for a number of cases of poisoning. The toolkit illustrates the use of risk assessments and information available from international sources and their extrapolation to conditions at the national level. Awareness raising about the toolkit and promotion of its use by countries has started. A web-based version is in preparation and will be ready for use by late 2010;
- the use of DDT in indoor residual spraying for malaria prevention is being re-evaluated. This project is due to be completed by the end of 2010. The draft hazard assessment was released for public and peer review in early 2009, and was the subject of an expert meeting in June 2009. The draft exposure assessment was released for public and peer review in August 2009 and was the subject of an expert meeting in December 2009. The assessments have now been revised following these expert meetings and the final risk assessment meeting will take place in November 2010;

- the use of insecticides in aircraft disinsection is being re-evaluated. A generic risk assessment model is being developed and will be applied to insecticides currently used and proposed for use in aircraft disinsection for disease vector control. The draft model was released for public and peer review in April 2010. Once the model has been revised stakeholders will be invited to submit information on products currently used or proposed for use for aircraft disinsection and these will be assessed by WHO using the risk assessment model. The outcomes of this project will be considered by an expert meeting early in 2011 and the results will be made publicly available to assist countries in making informed decisions regarding methods for aircraft disinsection.

WHOPES

The WHO Pesticide Evaluation Scheme (WHOPES) participated in several major meetings and events since previous JMPM meeting held in FAO Headquarters (HQ), Rome, October 2009. These were:

- Pan African Malaria Vector Control Conference, 25–29 October 2009, Zanzibar, Tanzania. The meeting was attended by more than 110 scientists and staff of national malaria control programmes, mainly from the 15 African countries supported by the US President's Malaria Initiative, i.e. Angola, Benin, Ethiopia, Ghana, Kenya, Liberia, Madagascar, Malawi, Mali, Mozambique, Rwanda, Senegal, Uganda, United Republic of Tanzania and Zambia. The meeting noted the urgent need for strengthening the capacity of African countries in judicious use of insecticides, based on principles of IVM, to address the growing concerns over insecticide resistance in malaria vectors on the continent. This would ensure extended use of the existing, but limited arsenal of less hazardous and cost-effective insecticides, for the control of malaria vectors and should include monitoring for insecticide resistance and routine monitoring and evaluation of vector control interventions. The meeting also discussed the need for continued investment for development of innovative technologies for vector control and for safe and effective use of insecticides, including cost-effective, environmentally-sound and pragmatic method(s) for disposal of insecticide waste;
- First IVM stakeholders' meeting, WHO/HQ, 11–13 November 2009, Geneva, Switzerland. The meeting shared information on a wealth of diverse experiences of relevance to IVM, and introduced participants to the breadth of work in sectors beyond health that are useful experiences for IVM. Major recommendations included the establishment of a WHO Global Advisory Committee on IVM to oversee a formalized network on IVM and convening an annual stakeholders' meeting to enable sharing of resources and information;
- Consultation on national public health pesticide management policy in the WHO South-East Asia (SEA) region, 9–10 April 2010, Hyderabad, India. The consultation was attended by ten experts from India, Indonesia, Myanmar, Sri Lanka and Thailand as well as by WHO secretariat from HQ and the Regional Office. The meeting recognized the great challenges faced with management of public health pesticides in the SEA Region, notably inadequate legislation, and the limited capacity for regulation, enforcement and life-cycle approach in management of these pesticides as well as for effective vector control operations. Furthermore, the meeting noted the challenges posed for management of public health pesticides under decentralized governance and health systems, the depleting arsenal of less hazardous and cost-effective pesticides requiring their judicious use to extend their useful life, the high amount of substandard,

illegal and counterfeit pesticides on the market, and the generally inadequate capacity for quality control. The meeting reviewed and discussed the draft *Guidelines on public health pesticide management policy for the WHO South-East Asia Region*. The guidelines discuss issues and driving forces for national policy development and provide guidance on the process of policy formulation, implementation and evaluation. WHOPES in collaboration with the WHO SEA Region subsequently published these guidelines;

- FAO/WHO Workshop on development of pesticide specifications, 13–15 April 2010, Chengdu, China. The workshop was organized by the Institute for the Control of Agrochemicals (ICAMA) and was attended by 84 participants from pesticide industry as well by staff of the pesticide regulatory authority. The scope, requirements, criteria and procedures for development of FAO and WHO specifications for pesticides, including determination of relevant impurities and determination of equivalence for "me-too" products (i.e. extension of specifications), were presented and discussed;
- FAO/UNEP/WHO side event on 'Reducing risks from pesticides in food production and public health', on 5 May 2010 at UN HQ, New York, USA, during the 18th session of the UN Commission on Sustainable Development (CSD-18), 3–14 May 2010. The side event contributed in raising awareness of stakeholder groups in the specific needs of pesticide management, particularly in the developing countries, in the context of national and international agreements and frameworks on chemicals management;
- Ninth FAO/WHO Joint Meeting on Pesticide Specifications (JMPS), Ljubljana, Republic of Slovenia, 2–6 June 2010. The data package in support of specifications for 28 pesticide compounds (12 new and 16 reviewed in previous JMPS meetings and pending completion), including public health products, were reviewed under the *new procedure*, using unified FAO /WHO procedures and data package requirements. Furthermore, a number of amendments to the *Manual on development and use of FAO and WHO specifications for pesticides* were reviewed and adopted, and a new version of this manual should be available by November 2010;
- Third Meeting of the Regional Scientific and Technical Advisory Committee of the WHO Eastern Mediterranean Region/Global Environment Facility (GEF) Supported Project on *Demonstration of sustainable alternatives to DDT and strengthening of vector control capabilities in Middle East and North Africa*, and the Training Workshop on Cost-effectiveness Analysis of Alternative Vector Control Interventions, Damascus, Syrian Arab Republic, 12–16 July 2010. The participating countries in the Project are Djibouti, Egypt, Jordan, Islamic Republic of Iran, Morocco, Sudan, Syrian Arab Republic and Yemen. The meeting noted the gaps and inadequate capacity identified in all participating countries for sound management of public health pesticides made an urgent request from WHO for further advocacy, resource mobilization and technical support.

Dr Zaim also informed the meeting of the publication of three guidelines for efficacy testing and evaluation of public health pesticides, and three generic risk assessment models. These are guidelines for laboratory and field testing and evaluation of (1) mosquito insect repellents for human skin, (2) insecticides for indoor and outdoor, ground-applied space spray applications, and (3) household insecticide products (mosquito coils, vaporizer mats, liquid vaporizers and aerosols) and generic risk assessment models for: i) indoor residual spraying of insecticides, ii) in-door and out-door space spray application of insecticides for public

health, and iii) mosquito larviciding. He also informed the meeting of the publication of the 4th edition of the report on *Global Use of Insecticides for Vector-Borne Disease Control*.

Since the previous JMPM meeting and through the grants provided to WHO by the Bill and Melinda Gates Foundation for reduction of health risks through sound management of pesticides, WHOPES has supported Madagascar and Oman in situation analysis and needs assessment for management of public health pesticides; Madagascar, Sudan and Thailand in the assessment of capacity of the national quality control laboratory(ies); and Madagascar and Sudan in conducting two workshops on the development of pesticide specifications, including principles of equivalence determination.

The meeting was also informed of the WHO global survey on *Public health pesticide registration and management practices by WHO Member States* (see chapter 10.1).

Dr Zaim informed the meeting of the WHA *Resolution 63.26* on improvement of health through sound management of obsolete pesticides and other obsolete chemicals. This resolution urges Member States to establish or strengthen capacity for the regulation of the sound management of pesticides throughout their life-cycle, as a preventive measure to avoid accumulation of obsolete chemicals. He noted the urgent need for expansion of support to Member States on this priority subject and reiterated the further political advocacy and resource mobilization which is required for this purpose.

Dr Zaim reiterated the commitment of WHO to support Member States on safe and judicious use of public health pesticides and their life-cycle management and informed the meeting of WHO celebration of WHOPES 50th anniversary in June 2010. WHOPES serves as the focal point for management of public health pesticides in WHO and has been established in 1960 with the approval of the WHA. Dr Zaim noted the invaluable support to and the close collaboration of different stakeholders and partners with WHOPES, notably the academia and research institutions, government-supported agencies and national vector-borne disease control programmes, and pesticide industry.

7.2 UNEP

Dr Agneta Sundén-Bylehn informed the meeting about the major activities carried out by UNEP on aspects relevant to pesticide management since previous session of the JMPM.

SECE

UNEP organized a Brainstorming Meeting on Environmental and other factors needed for Evaluating and Managing Risks posed by Pesticides at Local Level, 1–3 July 2009, Geneva, Switzerland. In evaluating the potential risks involved with using pesticides, many countries rely almost solely on internationally-available data and hazard and risk assessments. They have little capacity to make risk management decisions that take into account environmental conditions and other local determinants that will affect behaviour and potential impacts of pesticides. The purpose of the meeting was to bring together the knowledge and experience among participating experts and stakeholders from different regions to discuss possibilities for improving the situation. Discussions aimed at exploring which or what type of local factors should be accounted for in risk based decision making, and identifying data gaps and needs of countries to enhance decision making that takes national or local circumstances into account.

The meeting recommended that a resource be established of scientific expertise on environmental issues linked to chemicals. Based on this recommendation, UNEP is presently in the process of creating the Scientific Expert Group on Chemicals and the Environment (SECE). The terms of reference of the SECE are being finalized and experts are being identified. Experts on SECE would act in their own capacity, preferably be drawn from academia, cover a broad range of environmental specialisations, and represent all regions. Specific tasks of SECE will depend on the needs of UNEP and its stakeholders.

Based on the needs identified in the brainstorming meeting, expert guidance will be developed in 2010 – 2011 on the following issues:

- identification of sensitive ecosystems;
- management of ecosystem services;
- simple exposure and fate models;
- socio-economic considerations in decision making.

Training tools on pesticide management

UNEP has updated the *Resource Tool for Training in Sound Management of Pesticides and Diagnosis and Treatment of Pesticide Poisoning*, which was jointly developed with WHO. The tool is available on CD-ROM and as a printed document. A Spanish version is now also available, and will be further field tested in Argentina.

Furthermore, UNEP is developing a training tool for teaching school children (age 9-15) to raise awareness of dangers of pesticides and other chemicals found in the household. The first version of this tool will pilot-tested towards the end of 2009.

Life-cycle management of ITNs

UNEP carries out a collaborative project with WHO on the life-cycle management of Insecticide Treated Mosquito Nets (ITNs). In Africa alone, about 300 million ITNs mainly long-lasting insecticidal nets) will be distributed by the end of 2010, and many more will be distributed in the years to come. Managing the recycling or disposal of these nets when they get to the end of their life-time will be a major challenge. The project therefore aims to investigate current use patterns for ITNs (both for intended and unintended purposes) and associated implications for vector control and environmental risk. Furthermore, the feasibility of collecting ITNs at their end-of-life and options for recycling and/or disposal are being assessed. The overall objective of the project is to develop proposals for large scale Environmental Management Systems (EMS) of used ITNs. Countries involved in the project are Kenya, Madagascar and Tanzania and support is provided through the Strategic Approach to International Chemicals Management (SAICM) Quick Start Programme (QSP) and the World Bank (WB).

Endocrine disrupting chemicals

In 2002, the International Programme on Chemical Safety (IPCS) published a *Global Assessment of the State-of-the-Science of Endocrine Disruptors*. Given the advances in scientific knowledge on endocrine disrupting chemicals over the last decade, UNEP has initiated the elaboration of an update of this global assessment. The update will focus on human health effects, ecological effects, mechanisms of action and modes of exposure. An important issue will also be the potential effects of multi-chemical uses. This is because

similar endocrine disrupting characteristics may be found in industrial chemicals, pesticides, components of consumer products, pharmaceuticals and veterinary drugs, which may imply risks of combination effects of these chemicals. The update is expected to be available towards the end of 2011.

Chemicals in products

At the request of the 2nd International Conference on Chemicals Management (ICCM-2), UNEP has started the Chemicals in Products (CIP) project, with the aim to improve accessibility to information required by stakeholders to safely manage chemicals in products. This is done through assessments of information needs and gaps, existing information systems and identification of priorities. Since the project covers all types of chemicals in products, pesticides are part of them. Presently, cases studies are ongoing for four prioritized product sectors: electronics, clothing/textiles, construction materials and toys. The assessments should lead to concrete recommendations to ICCM-3 on cooperative actions that are needed to improve availability of information on chemicals in products.

Framework for management of industrial chemicals

Finally, UNEP Chemicals Branch is initiating a study on possibilities to establish an international framework for addressing the sound management of industrial chemicals. The study will explicitly look at the Code of Conduct as a possible model. The framework would promote a multi-sectoral approach and address needs of different stakeholders, including industrial users, and would build on existing initiatives at the international level. One of its aims would be to develop standards and expert guidance on the sound management of chemicals.

7.3 FAO

Mr Davis informed the meeting about the major activities carried out by FAO on pesticide management since previous JMPM meeting, and indicated that these all focus on the sustainable reduction of risks caused by pesticides at the local, regional and global level, within the overall objective for sustainable intensification of agricultural production. FAO's activities in pesticide management fall within two main programme results:

- development and delivery to countries of tools, technical and policy guidance and information on hazardous pesticides subject to the Rotterdam Convention;
- provision of technical guidance and support for pesticide risk reduction through strengthened life cycle management of pesticides and promotion of integrated pest management (IPM).

FAO's objectives for pesticide management are similar at the central (HQ) level as well as the regional and sub-regional levels, although there may be specific regional focus.

Pesticide specifications

The 9th JMPM was organized from 2–6 June 2010 in Ljubljana, Slovenia. Its main outcome has been reported above by WHO (see chapter 7.1).

Subsequent to the JMPS, the 7th Collaborative International Pesticide Analytical Council (CIPAC)/FAO/WHO Open Meeting was held on 7 June, 2010, which was attended by more than 100 participants. Various topics were discussed at the meeting, such as pesticide specifications, pesticide quality and analytical protocols and procedures. Furthermore, the results of pesticides quality control activities carried out in 25 countries were presented, which showed that the average of non-compliance in 2009 was 5 percent higher than the average of the past seven years. This underlined that pesticide quality is still a critical problem in both industrialized and developing countries. The national compliance monitoring reports have been published as the annex of the Open Meeting minutes, and are available on the FAO website.

The 2011 JMPS, together with the 8th CIPAC/FAO/WHO Open Meeting, are tentatively scheduled for 8–16 June 2011 in Beijing, China.

Pesticide residues

The 2010 session of the FAO/WHO Joint Meeting on Pesticide Residues (JMPR) was held at FAO HQ, Rome, 21–30 September. A total of 23 pesticides were evaluated, of which 8 were new compounds, and 5 were re-evaluated within the periodic review programme of the Codex Committee on Pesticide Residues (CCPR). The JMPR established about 10 acceptable daily intakes and acute reference doses, and recommended approximately 400 Maximum Residue Limits (MRLs).

The JMPM furthermore addressed various general considerations, in particular:

- the limited capacity and resources of JMPR to respond to increasing requests for evaluations. A discussion paper on how to address JMPR resource issues will be prepared for consideration by the next Session of CCPR in 2011;
- the need for appropriate consumption data and for further method development for dietary risk assessments conducted by the JMPR;
- statistical calculation of MRLs;
- use of proportionality in evaluation of residue data, with respect to the relationship between pesticide application rate and residues on the harvested commodity;
- estimation of group maximum residue levels for plant commodities;
- training in pesticide residue evaluation. A training manual will be tested at a training workshop to be held in November 2010 in Budapest, and the final version will be available on the FAO web by end of 2010.

The summary report of the last session of the JMPM will be available by mid-October 2010.

Rotterdam Convention

The number of Parties to the Rotterdam Convention continues to increase, and now stands at 139. At the last Conference of Parties (CoP), tributyltin compounds have been added to Annex III, which now totals 40 chemicals.

Technical assistance activities to strengthen implementation of the Rotterdam Convention have been expanded, and include since the last JMPM awareness raising and training meetings (in 46 countries), development of national action plans (in 22 countries), and promotion of synergies between stakeholders at the national level.

Furthermore, various thematic meetings and pilot programmes have been organized on:

- trade and trade partner meetings (in two countries and partners);
- monitoring and reporting of Severely Hazardous Pesticide Formulation (SHPF) (in eight countries);
- industrial chemicals management

The 6th Session of the Chemical Review Committee (CRC) convened from 15–19 March 2010 and was attended by 30 Committee members and 62 observers. The CRC reviewed notifications of final regulatory actions to ban or severely restrict five pesticides (amitraz, azinphos-methyl, endosulfan, methyl bromide and paraquat); no industrial chemical was reviewed.

The CRC concluded for endosulfan that the notifications of final regulatory actions from Burkina Faso, Cape Verde, the Gambia, Guinea-Bissau, Mali, Mauritania, Niger and Senegal met the criteria set by the Convention, and recommend that CoP should list endosulfan in Annex III to the Rotterdam Convention. The CRC also agreed on the draft text of the decision guidance document on endosulfan and to recommend to forward it to the CoP for consideration. For azinphos-methyl, two notifications met Annex II criteria and the CRC recommended to prepare a draft decision guidance document intersessionally.

For the 7th Session of the CRC, a proposal for a severely hazardous pesticide formulation of paraquat, submitted by Burkina Faso, will be reviewed.

The 5th Conference of Parties of the Rotterdam Convention has been scheduled for 20–24 June 2011 and will consider, among other issues, a new programme for technical assistance for the period 2012–13, and inclusion of alachlor and aldicarb (new compounds) and endosulfan and chrysotile asbestos (re-consideration based on new data) on Annex III of the Rotterdam Convention.

Field projects

Mr Davis underlined the importance of projects on different aspects of pesticide management that are supported and/or implemented by FAO in the field (either at national or regional level). He presented a selection of recently prepared or started field projects, but underlined that this was not an exhaustive list and many other field activities were ongoing. Projects in the different regions highlighted were:

Europe

- Armenia: technical advice for pesticide landfill collapse
- Eastern Europe, Caucasus and Central Asia countries (EECCA): Capacity building for POPs and obsolete pesticides management
- Georgia: locust control and pesticide triangulation
- Ukraine: proposal for Code of Conduct implementation

Africa

- ASP Phase 1: prevention and disposal of obsolete pesticides, in seven countries. This project is advancing towards completion
- ASP Phase 2: FAO-WHO-UNEP proposal in development

- Botswana, Eritrea, Mozambique: prevention and disposal of obsolete pesticides
- CILSS – Comité Sahélien des Pesticides: capacity development in pesticide registration and post-registration
- University of Cape Town: post-graduate course on pesticide risk management

Latin America

- Bolivia: obsolete pesticides inventory and pilot disposal
- Caribbean countries: obsolete pesticides inventory; harmonization of pesticide registration; communications and awareness building
- Comunidad Andina (CAN): post-registration management of pesticides
- Paraguay: disposal of obsolete pesticides

Asia

- Afghanistan: elaboration of pesticide legislation and regulations
- Pacific countries: harmonization of pesticide legislation and registration; waste (containers) management
- Pakistan: pesticide risk reduction
- South East Asia: strengthening pesticide management

Near East

- Gulf Cooperation Countries (GCC): Strengthening pesticides management
- Lebanon: Pesticide risk reduction
- Maghreb and Near East countries: IPM programme
- Syria: Prevention and disposal of obsolete pesticides and capacity building for better pesticide management

FAO Initiative on soaring food prices

By mid-2008, international food prices had skyrocketed to their highest level in 30 years. This, coupled with the global economic downturn, pushed millions more people into poverty and hunger. Food prices will likely remain volatile and efforts are needed to scale up food production, strengthen the resilience of small farmers to future shocks, and to improve food and nutrition security over the long term. Therefore, in late 2007 FAO launched its *Initiative on Soaring Food Prices* to help smallholder farmers grow more food and earn more money.

FAO implements the Food Facility, a large programme supported by the European Union (EU), to intensify agricultural production in developing countries. However, there is often a temptation to boost production by boosting the use of agricultural inputs. FAO tries to resist this temptation, at least where it concerns pesticides. The pesticide risk reduction group works at FAO in close collaboration with the Food Facility to ensure that pesticides are not supplied as an automatic element of intensification projects, but that sustainable practices and IPM are used to the extent possible. A follow-up to the Food Facility is presently under discussion with the EU, and it is likely that sustainable intensification of crop production will become an important element of it.

7.4 Discussion

The meeting discussed the presentations made by the three organizations and requested a number of clarifications.

The development of efficacy guidelines and risk assessment models on the use of insecticides for aircraft disinsection was supported, as regulatory authorities in developing countries are regularly requested to evaluate this group of pesticides. Participants welcomed the WHA Resolution on sound management of chemicals and underlined the importance of the need to increase the capacity of countries for the management of pesticides, monitoring and evaluation of vector control interventions, and management of pesticide-related waste. The meeting took note of the ongoing review by WHO on the use of DDT in indoor residual spraying for malaria prevention, and of the associated risk assessment to be finalized shortly. Participants stressed the importance of actively supporting the development of alternatives for DDT, and putting them in place where feasible.

The meeting welcomed the work of UNEP in establishing the SECE. It was suggested that membership of SECE should not be limited to academia only, but that the practical experience of regulators and other persons involved in the management of chemicals in the field, would be very valuable. Participants noted that chemicals legislation is still very weak in many countries, in contrast to pesticides which tend to be better regulated. The JMPM agreed that the Code of Conduct may serve as a useful model for management and regulation of industrial chemicals, since it has been effectively used for a long time as a basis for pesticide management in many countries.

The participants took note of the wide variety of field activities related to pesticide management implemented and supported by FAO. The meeting supported FAO's proposal to focus on regional needs and solutions. In this respect, it was suggested that full advantage should be taken of existing initiatives by regional entities to strengthen economic cooperation, as these often involve harmonization of standard-setting in the field of trade, food safety, plant health, and environmental and worker protection. Support to regional organizations could therefore also provide opportunities to strengthen capacities of countries for pesticide management in a broader sense. Members of the JMPM agreed that priority should be given to risk reduction efforts on commodities where the most pesticides are used and/or where the risk of pesticides is greatest.

8. Highly hazardous pesticides

After recalling a number of the recommendations made during the last session of the JMPM with respect to reducing risks of highly hazardous pesticides (HHPs), various presentations were made on activities that have been carried out to implement these recommendations.

8.1 FAO

The meeting was informed about the status of a pilot project on risk reduction of HHPs in Mozambique, discussed during the last Session of the JMPM. The aim of the pilot project is to define the use of HHPs in Mozambique and identify alternatives which would allow a progressive phase-out of their use. The project will attempt to apply a number of the recommendations on HHPs made by the JMPM in previous sessions to a specific national situation.

The proposal of this project had been amended to take into account concrete indicators and targets, and to ensure that the FAO/WHO Guidelines on developing a reporting system for health and environmental incidents resulting from exposure to pesticides would be used, as recommended by the previous Session of the JMPM. The project was then re-submitted to the SAICM QSP for possible funding.

The meeting was also presented with a summary of a study on pesticide use in cotton in selected countries, carried by the International Cotton Advisory Committee (ICAC) with support from FAO. The objectives of this study were to analyse trends in the use of pesticides on cotton over 14 years in Australia (1995-2007), Brazil, India, Turkey and in the USA (1994-2006), and to evaluate the hazards of pesticide use on cotton to human health and the environment in these countries.

The study showed trends, among countries and over time, in pesticide use as well as in hazards to human health and the environment. It concluded that a small number of substances contributed to more than 50 percent of human health hazards caused by overall pesticide use on cotton, and more than 50 percent of environmental hazards. Four substances alone were responsible for 60 percent of the hazard posed to fish.

On the basis of this study, the ICAC Expert Panel on Social, Environmental and Economic Performance of Cotton Production (SEEP) made a number of recommendations, among them:

- WHO Hazard Class I pesticides should be eliminated from cotton production in countries where adequate provisions for their management are not in place;
- use of active ingredients that account for the highest contribution to the environmental toxicity load should be minimized;
- pesticides known to pose possible risk of harm to the unborn child or to breastfeeding children should be eliminated from the cotton production system.

The 69th Plenary Meeting of ICAC, held in September 2010, subsequently unanimously adopted the recommendations of SEEP.

8.2 Rotterdam Convention

A presentation was made about the Rotterdam Convention programme to reinforce capacities to identify severely hazardous pesticides formulations (SHPFs). An SHPF, as defined by the Convention, is “a chemical formulated for pesticidal use that produces severe health or environmental effects observable within a short period of time after single or multiple exposure, under conditions of use”.

There are many cases of pesticide poisoning caused by SHPFs, but reporting of these incidents has encountered various challenges, which include: lack of a legal or policy framework in support to the collection of data on poisoning; insufficient documentation of poisoning incidents at the national level; limited knowledge with the Designated National Authorities (DNA) of the process to submit reports on SHPFs; lack of communication between the DNA and relevant ministries or agencies concerned with human health incidents or farmer organizations; lack of political will to submit reports to the Convention.

The Rotterdam Convention therefore has initiated a programme to assist developing countries in establishing a national framework to monitor problems caused by SHPFs on human health and on the environment. This is also a key opportunity for developing countries to raise awareness on certain hazardous formulations.

A three-step national programme has been developed in this respect:

1. organization of a national awareness raising meeting that brings together representatives from key ministries (e.g. responsible for agriculture, public health, environment), Non-Governmental Organizations (NGOs) and farmers;
2. collection of information on pesticide formulations used, conditions of use, and poisoning incidents occurring;
3. organization of a national meeting to evaluate and consolidate the results and to decide on the next actions to take at national level.

Projects to test out this approach have been carried out or initiated in Benin, Burkina Faso, Côte d'Ivoire, Ecuador, Ghana, Jordan, Lebanon, Mali, Syria, Tanzania, Togo and various countries in Asia, all with major involvement of local NGOs. WHO also provides important support for these pilot activities.

Based on these experiences, a new SHPF Tool Kit is under development to assist countries in monitoring and reporting SHPFs.

8.3 WHO

The JMPM was informed about the efforts by WHO to update the *WHO Recommended classification of pesticides by hazard*, as recommended during the previous Session of the JMPM.

A new version of the WHO Classification has been published on 2010. This publication, which updates the 2004 version, now takes into account the *Globally Harmonized System of classification and labelling of chemicals* in determining the acute toxicity of pesticides. The acute toxicity categories of the GHS have been used as the starting point for determining the

classification decision. However, as with previous editions, the classification of some pesticides has been adjusted to take account of severe hazards to health other than acute toxicity. The GHS acute toxicity hazard category for every pesticide is now presented in addition to the existing information. The document is available online and is also available as a hard copy publication. Other data sources are now being explored for making information on GHS classifications for other hazards available for pesticides. These hazards could include carcinogenicity, mutagenicity and reproductive toxicity and also specific target organ toxicity (from single or repeated exposure). This is being undertaken through the UN Sub-Committee of Experts on GHS.

A project to raise awareness and promote actions to address health issues related to highly hazardous pesticides (Class Ia and Ib), as well as 9 other chemicals of major public health concern has been undertaken (see chapter 7.1). A short information document on highly hazardous pesticides targeted at decision makers has been developed and was reviewed at an expert meeting in December 2009. This document is being published during 2010 along with a compilation of references to relevant FAO and WHO materials relating to pesticide management.

The development of International Chemical Safety Cards (ICSCs) has continued, which summarize essential product identity data and health and safety information on pure chemicals for use by workers, employers and the public at large. Approximately 150 ICSCs cover pesticides. ICSCs are made available via the Internet. WHO is adding GHS classifications to ICSCs as they are developed or updated.

8.4 Examples from selected countries

China

A presentation was given to the JMPM about experiences of China with the phasing out of HHPs. So far, 23 pesticides have been banned from use in China, most of which are HHPs. This includes the cancellation of registration of five very widely used organophosphates in 2005 that represented about 30 percent of insecticide consumption in China at the time. In addition, several pesticides have been severely restricted, with many uses on crops being cancelled.

At present, a plan to phase out an additional 22 HHPs has been made that are present in about 900 pesticide products, and are produced by approximately 400 companies. These products represent about 2 percent of total national production and 10 percent of national consumption of pesticides. A three-step process has been adopted for the phase out of these HHPs:

1. cancellation of the registrations of all 22 pesticides on vegetables, fruits, tea and medicine herbs at the end of 2010;
2. cancellation of all registrations of 10 HHPs at the end of 2010, and banning of their uses in 2013;
3. phasing out of the remaining 12 HHPs, based on further risk assessment results and measures taken by international conventions, over a period of 5 – 10 years.

Phasing out of these HHPs in China poses several major challenges, among them:

- the lack of effective alternative pest control options (both chemical and non-chemical) in some crops or against some pests;
- the severe negative impact on some pesticide manufacturers, especially those producing only a few pesticides;
- ensuring effective enforcement of the bans and preventing illegal production and sales.

Therefore, China will be taking a range of measures with the aim to facilitate the phase-out of HPPs, such as:

- progressive cancellation of pesticides and uses over a reasonable period of time, to allow both farmers and pesticide manufacturers to adopt new products of pest control methods;
- active support to the development of alternatives, e.g. through the promotion of biopesticides;
- provision of technical and financial support to pesticide manufacturers, to shift production to other compounds;
- provision of technical support and subsidies to farmers to adopt the use of biopesticides and non-chemical control options;
- awareness building and strengthening of law enforcement.

The Chinese government expects that the phasing out of these HHPs will improve food safety, reduce poisoning incidents and improve the security of farmers and manufacturing workers.

A number of lessons learned from these experiences in China were highlighted:

- ensure good justification and argumentation for the phasing out of the pesticides. Carry out good health and environmental risk assessments and of possible effects on trade;
- take advantage of opportunities that may favour measures to ban pesticides, such as recent food safety issues;
- carry out a good impact assessment of banning a pesticide, both regarding effects on pest management in agriculture and on manufacturing of pesticides, and elaborate alternatives;
- develop a comprehensive plan for the phase-out process;
- ensure supporting measures for implementation of the plan (legal, administrative, financial, technical, information and awareness).

Latin America

The meeting was informed about regulatory decisions to phase out the use of highly hazardous pesticides in a number of countries in Latin America. In May 2010, Ecuador banned all WHO class Ia and Ib pesticides. Similar measures are likely to be taken by Bolivia and Chile shortly. Colombia, Costa Rica, Panama and Paraguay have taken specific actions against some specific pesticides, many of which are HHPs. Various other countries in Latin America are also preparing actions to ban or restrict hazardous pesticides.

There are three major reasons for these regulatory actions in Latin America:

- internal pressure from farmer associations and other NGOs regarding the improvement of worker safety. This was supported by a large body of evidence on the human health effects of pesticide use in the region (e.g. collected through the P LAGSALUD programme), which was effectively brought to public attention on a regular basis. This was complemented by pressure from environmental and consumer groups regarding food and environment safety;
- increased capacity of the regulatory authorities in the countries to take good decisions. This was the result of capacity building, in which FAO played a role through the organization of training and workshops, and through the ongoing harmonization of pesticide registration procedures in the region;
- requirements from international markets with respect to maximum residue limits of pesticides. Several countries in the region are primarily targeting the United States of America (USA) and EU markets for exports of fruits and vegetables and therefore need to comply with the, often strict, MRLs from the importing countries.

In particular the first two points can be supported by international organizations such as FAO, WHO and UNEP, for instance through information collection and capacity building.

8.5 Discussion

The JMPM discussed the case study carried out by ICAC in collaboration with FAO that had identified the risks associated with the use of pesticides on cotton. Participants discussed the hazard indicators used for the study and their strengths and weaknesses. The JMPM welcomed the recommendations adopted by ICAC to reduce the use and risks of pesticides in cotton. It was suggested that similar work should be carried out for other crops including rice and bananas, where pesticides are used extensively and efforts to reduce risk could be of greatest benefit.

The JMPM discussed the work of the Rotterdam Convention on SHPFs. Participants confirmed the problems encountered by many developing countries in collecting data on pesticide poisoning or environmental incidents. A recent WHO survey (see section 10.1) showed that 60 percent of responding countries did not have access to aggregate data on pesticide poisoning incidents. But even where such data are collected, often the information does not reach the DNAs of the Rotterdam Convention due to a lack of communication among relevant ministries. This problem is augmented by the decentralization of health systems that has taken pace in many countries. The meeting confirmed the critical importance of effective national poison control centres or units, which could ensure the collection and analysis of data and linkages to relevant other ministries and the DNA.

Participants pointed out that the use of the terms SHPF (used by the Rotterdam Convention) and HHP (used by the FAO Council and the JMPM) might be confusing. It noted though that SHPFs are only one category in the criteria for HHPs defined by the JMPM, and that as such the latter have broader coverage. Also, it was underlined that SHPFs are a statutory part of the Rotterdam Convention process, and therefore strictly defined. It was suggested that synergies between the two programmes should be sought whenever useful, and that advantage should be taken from the more comprehensive and flexible definition of HHPs when possible. The JMPM welcomed the programme by the Rotterdam Convention to reinforce national

capacities to identify SHPFs, and indicated that lessons could be learnt or similar tools developed for identifying and documenting the risk of HHPs.

The meeting discussed WHO's work on the harmonization of the WHO Recommended classification of pesticides by hazard with the GHS. The JMPM was informed about the revision of the WHO classification and noted that, while this revision has been partially aligned with the GHS, the two systems are still not fully harmonized. The JMPM reiterated the value of WHO's classification as a simple and clear interpretation of pesticide hazards, in particular for developing countries and emphasized that integrating the full range of GHS health classifications with the WHO classification would have great value.

The participants further noted that ICSCs are being updated to incorporate the GHS classification. Revision of ICSCs goes through an international peer review process and new cards include all GHS classifications, including chronic toxicity. JMPM supported the suggestion by WHO that priority is given to HHPs in the generation and/or updating of ICSCs.

The JMPM discussed developments in China and certain Latin America countries to phase-out the use of HHPs. Participants stressed the importance of the development and availability of effective alternatives to HHPs as a basis for successful phase-out of HHPs. The meeting also discussed the advantages and disadvantages of partial restrictions versus complete banning of HHPs, and the need for effective compliance monitoring and enforcement of such measures. The JMPM recommended that experiences from countries having phased out certain pesticides be used for developing practical guidance to assist other countries in the process of reducing risks posed by HHPs, including the cancellation of registration(s).

9. Updating the Code of Conduct

The meeting was informed about the status of the update of the Code of Conduct. Following the agreement obtained from the FAO Committee on Agriculture (COAG) to advance with the update, WHO and UNEP had submitted an initial set of suggested amendments in 2009. These suggestions had been circulated among JMPM members and observers after the previous Session of the JMPM. Written comments on the proposed amendments were subsequently provided by Pesticide Action Network (PAN).

On the basis of the suggested amendments by WHO and UNEP and the comments by PAN, FAO prepared a first consolidated draft update by September 2010, which was circulated to JMPM members and observers in advance of the present Session. The principles applied by FAO in preparing this draft update were based on previous recommendations of the JMPM:

- amendments focussed on ensuring that the scope of the Code of Conduct adequately covers public health pesticides and other non-agricultural pesticides, and environmental concerns;
- major revisions were avoided;
- certain provisions were clarified or corrected to improve readability and/or comprehension;

- references were updated and extended.

Concern was expressed by some participants that the time that had been available for review of the proposed draft amendments had been short. However, the JMPM and observers decided to discuss the draft amendments and provided comments and additional suggestions. It was noted that some of the proposed amendments could be considered substantial by some stakeholders and might require more in-depth review and discussion.

Therefore, the JMPM recommended that a working group be established, composed of JMPM members and one representative each from the observers PAN, CropLife International and Agrocare, as well as FAO, WHO and UNEP, to further elaborate the update.

All comments and suggestions made in the present Session of the JMPM would be collated by FAO and made available to the working group. Additional written comments should be submitted by 15 November 2010. The working group would initiate activities immediately afterwards so that a second draft could be circulated to the JMPM and observers by 10 December 2010.

The JMPM recommended that comments on the new draft be submitted by 7 January 2011; FAO, WHO and UNEP should subsequently prepare and circulate a final draft to the JMPM and observers to ensure that a JMPM-endorsed final draft of the Code of Conduct be available by late January 2010.

The JMPM emphasized the urgency of bringing the updated Code of Conduct for adoption to the FAO Conference in June 2011 and subsequent endorsement by the WHA and the UN EP Governing Council; it therefore requested that FAO, WHO, UNEP as well as relevant stakeholders respect the proposed timeline.

10. Selected activities to strengthen pesticide management at the national level

10.1 WHO global survey on pesticide registration and management practices

The JMPM was informed of the WHO survey carried out in vector-borne disease endemic countries to critically map and document Public Health Pesticide (PHP) registration and management practices by Member States in order to better inform future plans to optimize and harmonize registration procedures and post-registration regulation. The results of the study will also be used to develop strategies and action plans for capacity strengthening of the Member States and for mobilizing required resources.

In total, 113 countries responded to the questionnaire, out of 140 vector-borne disease endemic countries targeted, which is an overall response rate of 80 percent, i.e. 94 percent of the total population targeted. Selected results of the study were presented.

Overall, in 89 percent of countries the pesticide legislation covers the regulation of public health pesticides; 61 percent of countries had published registration guidelines for PHPs.

About 70 percent of the respondents indicated that the country had a unified registration authority responsible for the registration of vector control, household and professional pest control pesticides as for registration of agricultural pesticides. This figure was only about 50 percent for pesticides applied directly to humans. WHOPES recommendations for public health pesticides were required as a condition for registration by 74 percent of countries. In 72 percent of countries the Ministry of Health uses or makes reference to the Code of Conduct in the management of public health pesticides.

On average, half of the countries indicated to have a pesticide quality control laboratory, while about 67 percent of countries expressed moderate to great concern about substandard and counterfeit pesticides. In the large majority (90 percent) of countries are WHO specification of pesticides part of procurement requirements. In about 20 percent of countries there was little enforcement of pesticide regulations in the health sector, and in about a third there was only some enforcement. Guidance documents for disposal of empty pesticide containers and pesticide waste were only available at the Ministry of Health in about 42 percent of countries.

More than 60 percent of countries had elaborated a national IVM policy. In only 20 percent of countries all persons responsible for decision-making and implementation of vector control activities had received certified training on this topic, and in only 15 percent of countries had they received training on sound management of pesticides.

The full report of the survey will be available on the WHOPES web site shortly.

The JMPM expressed its appreciation about the study and the high response rate obtained, and noted that the results provide strategic direction and focus for policy development to strengthen public health pesticide management. The JMPM suggested that results be widely disseminated. The JMPM considers this study an important contribution to monitoring the implementation of the Code of Conduct.

10.2 Capacity building for pesticide registration

FAO informed the JMPM about recent reflexions on building capacity for pesticide registration, as a means to implement the recently published FAO/WHO *Guidelines for the registration of pesticides*. Since human and financial resources are limited, there is a need to focus attention areas that have the greatest impact. A number of key issues were identified that would likely need further work, among them:

- development of “needs-driven” registration approaches (only pesticides that are needed in the country would be registered) versus “supply-driven” approaches (all applicants that would like to register pesticide can do so), which would be of particular importance for smaller countries with limited markets and few human resources for registration;
- possibilities of twinning registration authorities in developing countries with their colleagues in more resource-rich countries, but recognizing that developing countries cannot copy highly elaborate systems;
- need for risk-based decision making, but making optimal use of existing more generic hazard assessments. Mapping out of risk assessment procedures applicable to developing countries, and development of guidance on how to interpret and apply risk assessments done by reputable registration authorities in other countries;

- further definition of post-registration monitoring and management of pesticides, and ways in which its results feed back into decision-making on registration;
- awareness building and information provision on options for regional approaches to pesticide registration, to optimize the use of limited resources.

In the ensuing discussion, the JMPM emphasized that both pesticide registration and post-registration activities require strengthening in many developing countries; solid national political support is an essential requirement in achieving this aim.

With regards to strengthening pesticide registration, the JMPM reinforced the suggestion that particular attention be given to capacity building for registration and development of appropriate pesticide risk assessment tools. It was also suggested that through the establishment of “risk envelopes” for specific pest-crop situations (an approach recently introduced in the EU), it may be possible to minimize the number of individual product/use assessments that need to be completed, which could be particularly valuable for developing countries.

For post-registration activities, the JMPM noted the importance of data collection on pesticide use, toxicovigilance, effective enforcement and regular quality control of pesticides. The JMPM therefore recommended that FAO and WHO give priority to strengthening national inspection and control systems. The JMPM further recognized the important role of poison control centres in the treatment of poisoning incidents and pesticide management, and therefore recommended the establishment or strengthening of national or regional poison centres.

The JMPM noted that twinning arrangements could be an effective means to sustainably strengthen registration and post-registration activities, and that these should encompass both “north-south” and “south-south” collaborations. Regionalization of certain aspects of pesticide management was also considered important, in particular with respect to data sharing, training and use of quality control laboratories. The JMPM recommended that these aspects be given particular attention by FAO, WHO and UNEP when designing projects and programmes.

The JMPM emphasized the need for advocacy and awareness-raising to obtain political support for the sound management of pesticides. It suggested that FAO, WHO and UNEP assist countries in determining and communicating the socioeconomic benefits of proper regulation and management of pesticides, as well as the costs to health and the environment arising from the lack of such programmes. The importance of “champions” and taking advantage from specific opportunities such as pesticide-related incidents as driving forces was also underlined.

The JMPM recommended that FAO and WHO develop proposals for advocacy and resource mobilization to implement the above recommendations.

10.3 Follow-up to the Africa Stockpiles Programme

The JMPM was informed that the first phase of the ASP would end by December 2011, and that a proposal for the second phase (ASP-2) was being developed. The first phase covers

seven countries in Africa, to be expanded to about 25 countries in five sub-regions for the second phase.

A partnership is being established for implementation of ASP-2, based on comparative advantages of different participating entities with respect to pesticide management. In addition to the participating countries, these are: the United Nations (UN) organizations FAO, WHO and UNEP; CropLife International as private sector party; PAN, representing NGOs; and the African Union. The ASP-2 will supplement existing initiatives and programmes by these organizations, and not create completely new ones.

The overall approach of ASP-2 is based on two stages: A preparatory stage in which national pesticide management situation analyses, needs assessments, and obsolete pesticide inventories and risk assessments are carried out. The second, implementation, stage will be based on the results of the first, and focus on:

- Clean-up of obsolete pesticides;
- Strengthening of pesticide policy and regulatory regimes, and regional harmonization;
- Implementation of sustainable pest management and policies;
- Institutional and technical capacity building;
- Public awareness and communication.

The JMPM commended FAO in bringing together several partners to finance and implement the programme. The proposal, if approved, could be used as a model for partnerships among countries, IGOs, NGOs and the private sector for the management of pesticides. The JMPM therefore fully supported the proposal.

11. New guidelines published

Various guidelines reviewed by the JMPM were finalized and published, since its previous Session, by FAO and WHO:

- FAO/WHO *Guidelines on pesticide advertising* (March 2010)
- FAO/WHO *Guidelines for the registration of pesticides* (April 2010)
- FAO *Guidance on pest and pesticide management policy* (June 2010)

All three guidelines are posted on the FAO and/or WHO websites, and are presently available in English. The *Guidelines for the registration of pesticides* are also available as a printed document.

12. Draft guidelines under development – review

The Panel reviewed two draft guidelines that are presently being developed.

12.1 Guidelines for quality control of pesticides

The previous Session of the JMPM, in October 2009, discussed an annotated outline for new *Guidelines for quality control of pesticides*, and requested FAO and WHO to initiate the drafting procedure of the full document.

A first draft of the guidelines was subsequently circulated to all JMPM members, observers and additional technical reviewers from the JPMPS, in July 2010. Based on the comments that were received, a second draft version of the guidelines was prepared, in August and September 2010, and circulated to JMPM members and observers in advance of the present Session.

The guidelines cover the legislative, administrative, organizational and infrastructure (facilities and trained manpower) requirements to implement a quality control scheme of pesticides in Member States. They do not include quality assurance practices of pesticide quality control laboratories which are covered under another set of guidelines developed by CIPAC, FAO and WHO.

This second draft was presented to the JMPM, and clarifications were provided by the drafter regarding the inclusion or exclusion of suggested amendments and comments made by the reviewers. The JMPM discussed its contents and made various suggestions for amendments and clarifications for consideration during the elaboration of the next version of the guidelines. They included:

- clarify the relationship between the analytical laboratory and the pesticides registration committee, in particular in view of ensuring information exchange but avoiding possible conflicts of interest;
- suggest options to ensure access to analytical standards;
- clarify that the guidelines are not only targeted to pesticide formulations but are equally applicable to technical materials;
- provide further details on risk-based sampling;
- include provisions on quality control of microbial pesticides;
- further clarify the relationship between inspection and quality control;
- provide additional attention to quality control of pesticides already on the market in a country, as opposed to pesticides as they enter into trade;
- elaborate on the role of pesticide specifications as a standard to decide whether a pesticide is obsolete;
- clarify, where it may be ambiguous, which responsible authority is referred to in the different sections of the guidelines;
- clarify which parties can challenge the results of quality control;
- clarify whether confidential information used to establish FAO/WHO specifications are integral part of those specifications and should be complied with in quality control;

- Clarify the level of quality assurance required for analytical laboratories (i.e. the need to comply with good laboratory practice (GLP) principles);
- Elaborate further on the responsibility for disposal of pesticides which are not compliant, or which may have become non-compliant during the legal process.

The JMPM agreed that further written comments be submitted by JMPM members by 31 October 2010. The JMPM recommended that a new version be subsequently prepared and circulated intersession to its members for final review and possible endorsement, and subsequent publication by FAO and WHO.

12.2 Guidelines on good labelling practice for pesticides

The second draft of the revision of the *Guidelines on good labelling practice for pesticides* was discussed at the previous Session of the JMPM, in October 2009. The JMPM recommended that a new version should subsequently be prepared, based on its comments and suggestions. A third draft of the revision was finalized in September 2010 and circulated to the JMPM members and observers in advance of the present Session.

The *Guidelines on good labelling practice for pesticides* concern the labelling of all pesticides, as defined in the Code of Conduct, in any form that is destined to be applied by end-users. The guidelines do not concern the labelling of pesticides in an industrial setting, i.e. active ingredients, bulk pesticide formulations destined for reformulation, repackaging or disposal, or other pesticide formulation components.

The third draft was presented to the JMPM, and clarifications were provided by the drafter regarding the inclusion or exclusion of suggested amendments and comments made by the previous Session of the JMPM and subsequent reviewers.

One of the reasons for revising the existing FAO pesticide labelling guidelines was the adoption of the GHS and its application to pesticide classification and labelling. However, the GHS classification system was previously not harmonized with WHO *Recommended classification of pesticides by hazard*, leading to uncertainty for regulators regarding the system to follow for pesticide labelling. Since the last Session of the JMPM, the WHO classification has been brought in line with the GHS, for acute toxicity, but the two classifications are not entirely harmonized (see chapters 8.3 & 8.5). As a result, the JMPM noted that its recommendation made at its previous Session “that clear advice on labelling needed to be provided to countries, and that parallel presentations of the WHO and GHS classifications for pesticides in the same guidelines should be avoided”, would not be feasible. The JMPM therefore recommended describing both systems in the guidelines, and providing guidance on applying either classification system as well as on the process of transition from WHO’s classification to the GHS.

The JMPM discussed the contents of the revision and made various additional suggestions for amendments and clarifications for consideration during the elaboration of the next version of the guidelines, among them:

- ensure that the definitions used in the guidelines are consistent with those used in the code of conduct;
- include a definition of “date of release” and of “shelf-life”;

- include some examples relevant to public health pesticides in the chapter on label content;
- include contact details of the national poison control centre on the label, if such a centre exists in the country;
- assess whether a clearer distinction can be made between absolutely mandatory information that should appear on all labels, and information which could be on the label (e.g. linked to certain groups of pesticides);
- include a statement cautioning against storing the product in places where food or feed are stored;
- include a statement that the container should be disposed of in a safe way;
- qualify the warning against re-use of containers, with respect to refillable household products;
- clarify how to apply hazard colour bands to either WHO or GHS hazard classification systems, and recommend against using colour coding for other aspects of the pesticide (e.g. for the type of pesticide);
- refer to triple-rinsing specifically in the container disposal section on the label, and not in the directions for use section;
- retain the precautionary pictograms for the use of the pesticide as defined originally by FAO and by the International Group of National Associations of Manufacturers of Agrochemical Products (Groupement International des Associations Nationales de Fabricants de Produits Agrochimiques - GIFAP);
- avoid too much information on the label.

The meeting noted the importance of harmonized classification and labelling in particular with respect to international trade in pesticides, and underlined that the GHS had been developed to this end. Most participants therefore indicated that a transition to GHS-based pesticide labelling would be advisable.

The JMPM stressed the importance of training and education of pesticide users as an essential element to ensure comprehension and proper use of the pesticide label. This was considered even more important for countries that plan to go through a transition to the GHS classification, with resulting changes on pesticide labels.

The JMPM agreed that further written comments on the guidelines be submitted by JMPM members and observers until 1 December 2010. The JMPM recommended that a working group of JMPM members be established to assist in preparing the next draft, based on the written comments to be provided, and the suggestions for amendments and additions as detailed in this report. The working group may consult with observers for specific inputs. The JMPM recommended that the revised draft be circulated to members and observers by May 2011, for discussion at its next session.

13. Draft outlines and concepts for guidelines – review

The JMPM discussed two outlines for guidelines to be developed in support of the Code of Conduct.

13.1 Guidelines on data requirements for registration of pesticides

A draft annotated outline for the *Guidelines on data requirements for registration of pesticides* was presented to the JMPM. The outline was prepared following a recommendation by the previous Session of the JMPM as a priority for development of supporting guidance for pesticide registration. A first draft outline had been prepared in June 2010 and circulated subsequently to all JMPM members and observers. On the basis of comments received, the outline was revised and circulated in advance of the present Session.

It was proposed that the scope of the guidelines is to provide a comprehensive list of data that may be required to allow governments to ensure that all pesticides used in any sector are effective for their intended purpose and do not pose unacceptable risk to human or animal health or the environment. The guidelines are also intended to describe under what circumstances and conditions different types of requirements are appropriate.

The draft outline was presented and the way in which previous comments were addressed was clarified. The meeting noted the complexity of providing comprehensive guidance on the topic.

Participants supported the proposal in the outline to clearly define sub-sets of data requirements for specific types of pesticides, types of registrations and pesticide uses. It was furthermore recommended to distinguish also between data required for evaluation of the a.i. and those required for the formulation, and to include conditionality of data requirements and justifications for waivers. The meeting suggested that a more modular presentation of the data requirements might be considered for the guidelines (e.g. in annexes) to avoid information overload.

It was suggested that, as many registrars in developing countries require and/or evaluate only study summaries or endpoints, and not full study reports, guidance should be provided in the document on how to assess the quality of the data submitted.

The JMPM agreed that further written comments could be submitted by JMPM members and observers until 1 December 2010, with particular focus on the outstanding questions identified by the drafter. The JMPM recommended that a revised draft outline be prepared, by a small working group consisting of the drafter and other JMPM members, by 1 February 2011. This working group should also advise FAO and WHO on how to proceed with drafting the full guidelines. The JMPM recommended that a full draft of the guidelines be prepared by July 2011, for discussion at its next session.

13.2 Guidelines on pesticides legislation

The 3rd Session of the JMPM in October 2009, recommended to launch the process of preparing formal *Guidelines on pesticides legislation*, using the FAO study *Designing national pesticide legislation* as a starting point. An outline for the guidelines was

subsequently prepared and circulated for comments among JMPM members and observers in summer 2010. A revised outline, reflecting the outcome of that consultation, was presented to the meeting.

The JMPM discussed the draft outline of the guidelines and made a number of suggestions for amendments or additions to its contents for consideration in the development of the full guidelines. These included:

- combine the sections on inspection and enforcement;
- Include a section on control of pesticide residues and related food safety issues;
- widen the scope of the section 1 licensing to include pest control operators, aerial application, formulators, etc.;
- include relevant results of the recent WHO survey on registration and management of public health pesticides in the introduction of the guidelines;
- provide further justifications and arguments on the benefits of legislation, including the recommendation to develop a single comprehensive legislation for all pesticides;
- stress the importance of inter-ministerial collaboration on the pesticide registration board;
- distinguish between a pesticide registration board (government) and a pesticide advisory committee (all stakeholders), and define their respective responsibilities;
- include provisions for re-registration based on re-evaluation of data;
- bring forward in the guidelines and elaborate on regional approaches to pesticide regulation and registration, as these are becoming increasingly important;
- include pesticide poisoning and environmental impact data, in the section on data collection and monitoring;
- include food safety issues and decentralization, in the section on the national context;
- include a section on the need for a country to define an acceptable level of risk (including setting criteria for banning or severely restricting pesticides);
- include a specific section on provisions for appeals against administrative and regulatory decisions (rather than inclusion under miscellaneous);
- refer to the most recent FAO/WHO guidelines for the registration of pesticides (rather than the superseded ones);
- include references to good models of national/regional legislation.

The JMPM noted that internationally there is a movement towards more integrated management of all chemicals, but that this was in particular focussing on information exchange and coordination. It was felt that pesticide use, distribution and management was sufficiently specific to merit separate comprehensive legislation. Participants also stressed that pesticide legislation in many countries was more advanced than industrial chemicals legislation. Care should be taken to ensure, however, that the principles of pesticide legislation would not conflict with the more general national chemicals legislation.

The JMPM recommended that FAO and WHO proceed with elaborating the full draft of the guidelines by July 2011, taking into account the suggestions made, for review at its next session.

14. Draft guidelines under development – status report

A status report on various draft guidelines or outlines under development was presented to the JMPM.

14.1 Guidelines on resistance management for pesticides

Draft *Guidelines on resistance management for pesticides* have been discussed at the previous Session of the JMPM. The JMPM had recommended that the final draft be sent to the external peer reviewers to only acknowledge that their comments have been satisfactorily addressed. The JMPM had also recommended that subsequently a final version of the guidelines be circulated, intersession, to its members for endorsement.

By mid-2010, the guidelines had been technically reviewed and any outstanding comments incorporated. However, in 2010 WHO initiated a process for the development of specific guidelines on resistance prevention and management of vector control insecticides. As a result, it was decided that the section on vector control in the present guidelines will be limited to a summary, and only FAO will issue the document. Furthermore, the consultation with external peer reviewers for the vector control section, suggested by the previous session, would not be needed anymore.

The meeting was informed that an editorial review of the guidelines will be carried out by FAO and the final version of the document will be circulated to the JMPM for endorsement by early 2011.

14.2 Guidelines on retail establishments

At its previous Session, the JMPM had endorsed the draft outline of the *Guidelines on pesticide retail establishments*, and requested FAO and WHO to proceed with drafting the full document.

However, drafting of these guidelines has been kept on hold to be able to incorporate experiences of several ongoing FAO field projects which deal with the organization and regulation of pesticide retail activities.

15. Other matters

15.1 Reducing trade in counterfeit pesticides

A presentation was made by CropLife International on the trade in counterfeit pesticides. A number of cases was presented where counterfeit pesticides had been identified and attempts had been made to track these consignments back to their sources. The economic, environmental and health costs of counterfeit pesticides were also underlined.

In addition, a short presentation was made about measures being taken to reduce counterfeiting in China.

The meeting acknowledged the growing concern regarding illegal and counterfeit pesticides but noted that the magnitude of the problem does not seem to be well documented and would need to be further defined. The JMPM recommended that FAO and WHO further support countries in establishing and enforcing pesticide regulations as a means to better document the extent of the problem.

15.2 FAO survey on use of guidelines published in support of the Code of Conduct

The JMPM was informed about a proposed survey by FAO to assess the level of use of guidelines that have been developed in support of the Code of Conduct. The objectives of the survey are to evaluate:

- the extent to which the current guidelines known and used;
- the extent to which current guidelines meet the needs of developing countries;
- how awareness about these guidelines, and their use, can be further enhanced;
- whether there a need for additional tools to supplement the guidelines.

The survey would focus on use of the guidelines in developing countries in particular.

Selected JMPM members subsequently reviewed and tested the survey, and provided inputs on how to improve or clarify the questions. The JMPM welcomed the planned survey and recommended that the results be presented and discussed at its next session.

The JMPM recognized the need for pragmatic approaches to promote the use of guidelines and other materials (e.g. case studies). The JMPM recommended that FAO and WHO commit or mobilize resources for the translation of guidelines.

15.3 PAN Global report

The JMPM acknowledged having received the report: *Communities in peril: Global report on health impacts of pesticide use in agriculture*, published by the PAN. However, the report could not be presented to and discussed by the JMPM during the present Session.

16. Recommendations

Based on the working documents reviewed, the presentations made and the discussions held during the meeting, the Joint Meeting on Pesticide Management (JMPM) made the following recommendations.

Terms of reference for observers

The JMPM reviewed the draft terms of reference for observers to the meeting and made a number of suggestions for amendments. The JMPM **recommended** that FAO and WHO finalize the terms of reference, circulate them to the JMPM for information and make them available to observers of the JMPM, so that they apply for its next session.

Developments since the previous session of the JMPM

The JMPM was informed of developments that had taken place since the previous session and specific actions taken by FAO, WHO and UNEP. The JMPM **reiterated** the comments made by WHO concerning the need to increase the capacity of its Member States for management of pesticides, monitoring and evaluation of vector control interventions, and management of obsolete pesticides, pesticide waste and containers. The JMPM **welcomed** the development of efficacy guidelines and risk assessment models on the use of insecticides for air craft disinsection, as these are greatly needed by developing countries. The JMPM also emphasized the importance of long-lasting insecticidal mosquito nets (LN) and their proper management and disposal. The JMPM **supported** the work of UNEP in establishing a Scientific Expert Group on Chemicals and the Environment and acknowledged that the Code of Conduct may serve as a useful model for management of industrial chemicals. The JMPM **welcomed** FAO's proposal to focus on regional needs and solutions as well as capacity building, including the need to increase synergies among international organizations (for example through the Inter-Organization Programme for the Sound Management of Chemicals (IOMC)). Members of the JMPM **agreed** that priority should be given to risk reduction efforts on commodities where the most pesticides are used and where the risk is greatest.

Highly hazardous pesticides

The JMPM was informed about a case study carried out by the International Cotton Advisory Committee (ICAC) in collaboration with FAO that had identified the risks associated with the use of pesticides on cotton. The JMPM welcomed the recommendations adopted by ICAC to reduce the use and risks of pesticides in cotton, and **suggested** similar work be carried out for other crops including rice and bananas, where pesticides are used extensively and efforts to reduce risk could be of greatest benefit.

The JMPM expressed its interest in the work of the Rotterdam Convention on severely hazardous pesticide formulations (SHPFs) and acknowledged that the criteria for highly hazardous pesticides (HHPs), as defined by the JMPM, provide a more comprehensive hazard-based approach. The JMPM noted that the Rotterdam Convention is carrying out field work to collect actual on-site data in order to take regulatory action on SHPFs. The JMPM **indicated** that lessons could be learnt or similar tools developed for identifying and documenting the risk of HHPs.

The JMPM commended WHO's work in addressing a number of recommendations made by the previous session to harmonize the WHO-recommended classification of pesticides by

hazard with the GHS. The JMPM was informed about the revision of the WHO classification of pesticides by hazard and noted that, while this revision has been partially aligned with the Globally Harmonized System of Classification and Labelling of Chemicals (GHS), the two systems are still not fully harmonized. The JMPM acknowledged the value of WHO's classification as a simple and clear interpretation of pesticide hazards, in particular for developing countries, and **emphasized** the importance of integrating the full range of GHS health classifications with the WHO classification. The JMPM further **recommended** that updates of International Chemical Safety Cards (ICSCs) for HHPs, incorporating the GHS classification, be prioritized by WHO.

The JMPM noted the work being done in China and various countries in Latin America to phase-out the use of HHPs. The JMPM **recommended** that experiences from such countries and lessons learnt be used for developing practical guidance to assist other countries in the process of reducing risks by and/or phasing-out HHPs.

Updating the International Code of Conduct

The JMPM and observers discussed the draft amendments proposed for updating the International Code of Conduct on the Distribution and Use of Pesticides and provided additional suggestions.

The JMPM **recommended** that a working group be established – composed of JMPM members and one representative each from the observers Pesticide Action Network, CropLife International and Agrocare, as well as FAO, WHO and UNEP – to further elaborate the update. Additional written comments should be submitted by 15 November 2010; the working group would initiate activities immediately afterwards so that a new draft update could be circulated to the JMPM and observers by 10 December 2010. The JMPM **recommended** that comments on the new draft be submitted by 7 January 2011; FAO, WHO and UNEP should subsequently prepare and circulate a final draft to the JMPM and observers to ensure that a JMPM-endorsed final draft of the Code of Conduct be available by late January 2010.

The JMPM **emphasized** the urgency of bringing the updated Code of Conduct for adoption to the FAO Conference in June 2011 and subsequent endorsement by the World Health Assembly and the UNEP Governing Council; it therefore **requested** that FAO, WHO, UNEP as well as relevant stakeholders respect the proposed timeline.

Selected activities to strengthen pesticide management at the national level

The JMPM noted the results of the survey on public health pesticide registration and management practices by WHO Member States and commended WHO for executing the study. The JMPM expressed its appreciation of the high response rate obtained and noted that the results provide strategic direction and focus for policy development to strengthen public health pesticide management. The JMPM considers this study an important contribution to monitoring the implementation of the International Code of Conduct.

The JMPM further noted FAO's presentation on ways forward in strengthening pesticide registration in developing countries.

The JMPM **emphasized** that both pesticide registration and post-registration activities require strengthening in many developing countries; solid national political support is an essential requirement in achieving this aim.

With regards to strengthening of pesticide registration, the JMPM **recommended** that particular attention be given to the continued capacity building for registration and the development of appropriate pesticide risk assessment tools.

For post-registration activities, the JMPM noted the importance of data collection on pesticide use, toxicovigilance, effective enforcement and regular quality control of pesticides. The JMPM therefore **recommended** that FAO and WHO give priority to strengthening national inspection and control systems. The JMPM further recognized the important role of poison control centres in the treatment of poisoning incidents and pesticide management, and therefore **recommended** the establishment or strengthening of national or regional centres.

The JMPM noted that pesticide management is the shared responsibility of different sectors, and highlighted the need for intersectoral collaboration, in particular among ministries of agriculture, the environment and health. The JMPM **recommended** that this issue be given particular attention by FAO, WHO and UNEP when designing projects and programmes.

The JMPM noted that twinning arrangements could be an effective means to sustainably strengthen registration and post-registration activities, and that these should encompass both “north-south” and “south-south” collaborations. Regionalization of certain aspects of pesticide management was also proposed, in particular with respect to data sharing, training and use of quality control laboratories. The JMPM **recommended** that these aspects be given particular attention by FAO, WHO and UNEP when designing projects and programmes.

The JMPM **emphasized** the need for advocacy and awareness-raising to obtain political support for the sound management of pesticides; it suggested that FAO, WHO and UNEP assist countries in determining and communicating the socioeconomic benefits of proper regulation and management of pesticides, as well as the costs to health and the environment arising from the lack of such programmes.

The JMPM **recommended** that WHO and FAO develop proposals for advocacy and resource mobilization to implement the above recommendations.

The JMPM was informed of a proposal for the second phase of the Africa Stockpiles Programme, and commended FAO in bringing together several partners to finance and implement the programme. The proposal, if approved, could be used as a model for partnerships among countries, IGOs, NGOs and the private sector for the management of pesticides. The JMPM therefore fully **supported** the proposal.

The JMPM recognized the need for pragmatic approaches to promote the use of guidelines and other materials (for example, case studies). The JMPM **recommended** that FAO and WHO commit or mobilize resources for the translation of guidelines. The JMPM also welcomed the planned survey on the use of certain FAO and WHO guidelines and tools, and **recommended** that the results be presented and discussed at its next session.

The JMPM noted the growing concern regarding illegal and counterfeit pesticides, and **recommended** that FAO and WHO further support countries in establishing and enforcing pesticide regulation as a means to better document the extent of the problem.

Guidelines in support of the Code of Conduct

The JMPM reviewed a number of draft guidelines that had been developed in support of the Code of Conduct and made the following recommendations.

- a. *Guidelines on quality control of pesticides.* The JMPM discussed the scope and contents of the guidelines and made suggestions for amendments and additions as detailed in this report. The JMPM **agreed** that further written comments be submitted by JMPM members by 31 October 2010. The JMPM **recommended** that a new version be subsequently prepared and circulated intersession to its members for final review and possible endorsement, and subsequent publication by WHO and FAO.
- b. *Guidelines on good labelling practice for pesticides.* The JMPM noted the difficulty of providing clear advice on classification of health hazards as a basis for labelling, because WHO's classification of pesticides by hazard and the GHS are not fully harmonized. The JMPM therefore **recommended** describing both systems in the guidelines, and providing guidance on applying either classification system as well as on the process of transition from WHO's classification to the GHS.

The JMPM **agreed** that further written comments on the guidelines be submitted by JMPM members and observers by 1 December 2010. The JMPM **recommended** that a working group of JMPM members be established to assist in preparing the next draft, based on the written comments to be provided, and the suggestions for amendments and additions as detailed in this report. The working group may consult with observers for specific inputs. The JMPM **recommended** that the revised draft be circulated to members and observers by May 2011, for discussion at its next session.

The JMPM reviewed a number of draft outlines for guidelines to be developed in support of the Code of Conduct and made the following recommendations.

- a. *Guidelines on data requirements for the registration of pesticides.* The JMPM discussed the scope and structure of the guidelines, provided a number of suggestions for the contents, as detailed in this report, and noted the complexity of providing comprehensive guidance on the topic. The JMPM **agreed** that further written comments be submitted by JMPM members and observers by 1 December 2010, with particular focus on the outstanding questions identified by the drafter. The JMPM **recommended** that a revised draft outline be prepared, with support from JMPM members, by 1 February 2011; this working group should also advise FAO and WHO on how to proceed with drafting the full guidelines. The JMPM **recommended** that a full draft of the guidelines be prepared by July 2011, for discussion at its next session.
- b. *Guidelines on legislation of pesticides.* The JMPM discussed the draft outline of the guidelines and made a number of suggestions for amendments or additions to its scope and contents, as detailed in this report. The JMPM **recommended** that FAO and WHO proceed with elaborating the full draft of the guidelines by July 2011, taking into account the suggestions made, for review at its next session.

17. Closure of the meeting

The 4th FAO/WHO Joint Meeting on Pesticide Management was closed on behalf of WHO by Dr Morteza Zaim, Coordinator Vector Control and Ecology, Department of Control of Neglected Tropical Diseases. Dr Zaim expressed his gratitude to the JMPM members for their willingness and availability to share again their knowledge and experiences on pesticide management with FAO and WHO. He also thanked the observers to the meeting, from IGOs, pesticide industry associations and USAID, for their constructive participation. Finally, Dr Zaim wished everybody a safe journey home.

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Annex 2 – Agenda

1. Panel working procedures [closed session]
2. Opening of the meeting and welcome address [start of open session]
3. Appointment of Chairperson and Rapporteurs
4. Adoption of agenda
5. Introduction of meeting procedure, working arrangements and housekeeping matters
6. Summary of developments and actions taken after the third joint meeting in October 2009
7. Highly hazardous pesticides:
 - 7.1 Status of implementation of recommendations made after the third joint meeting in October 2009.
 - 7.2 Linking with Rotterdam Convention work on severely hazardous pesticide formulations
 - 7.3 Updating of the WHO Classification on pesticides by hazard
 - 7.4 Examples of the phasing out of HHPs from selected countries
8. Updating the International Code of Conduct on Distribution and Use of Pesticides
9. Draft Guidelines under development – for review
 - 9.1 Guidelines on quality control of pesticides
 - 9.2 Guidelines on good labelling practice for pesticides
10. Draft outlines for Guidelines – for review
 - 10.1 Guidelines on data requirements for registration of pesticides
 - 10.2 Guidelines on legislation of pesticides
11. Draft Guidelines and outlines reviewed or discussed in previous meetings and pending finalization – status report.
 - 11.1 Guidelines on resistance prevention and management for pesticides
 - 11.2 Guidelines on pesticide retail establishments
12. Selected FAO and WHO activities to strengthen pesticide management at the national level – Lessons learned and implications for future programmes
 - 12.1 WHO survey on registration and management practices of Member States
 - 12.2 Pesticide registration: A plan of action to assist countries in building capacity for pesticide registration

13. Any other matters

13.1 Survey of use of FAO guidelines in support of the Code of Conduct

13.2 Reducing trade in counterfeit pesticides (CropLife International)

14. Recommendations [closed session followed by open session]