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Policy options and actions for expediting progress in implementation: chemicals

Report of the Secretary-General

Summary

Ensuring sound management of chemicals is an important element of achieving the Millennium Development Goals. The global production, trade and use of chemicals are increasing, placing increasing chemicals management demands on developing countries. The approach to chemicals management needs to be much better informed by a life-cycle and sustainable development perspective, considering the multiple social, economic and environmental dimensions of chemicals' impacts on human well-being. The focus of future policy options with respect to chemicals management should be to mainstream sound management into MDG-based national development planning process; strengthen regulations and legislation to improve chemical safety, prevent and reduce risks; enhance information accessibility and sharing; promote alternatives to toxic chemicals; strengthen the means of implementation including mobilization of financial resources at all levels from both public and private sector; foster partnerships among all stakeholders; and strengthen the international policy and legal framework and enabling environment for achieving the goal of sound management of chemicals.

* E/CN.18/2010

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I. Introduction

1. At its eighteenth session, the review session of the fourth implementation cycle 2010-2011, the Commission on Sustainable Development conducted an evaluation of progress achieved on the thematic issue of chemicals, as contained in Agenda 21, the Programme for the Further Implementation of Agenda 21 and the Johannesburg Plan of Implementation.[1] The Commission also identified constraints and obstacles as well as new challenges and opportunities to implementation in the thematic area of chemicals.

2. At its nineteenth session, the policy session of its current implementation cycle, the Commission will make decisions on policy options and practical measures to expedite implementation in the thematic area of chemicals. The Commission's session will be preceded by its intergovernmental preparatory meeting that will prepare a draft negotiating document for consideration by the Commission.

3. The present report is a contribution to the discussion at the intergovernmental preparatory meeting on policy options and practical actions to expedite progress on the sound management of chemicals. It responds to the challenges and obstacles highlighted in the report of the Commission's eighteenth session. The report was jointly prepared by the Department of Economic and Social Affairs (DESA) of the United Nations and the United Nations Environment Programme (UNEP). It benefited from inputs provided by Governments, Major Groups and the United Nations system, in particular the Strategic Approach to International Chemicals Management (SAICM), the Inter-Organization Programme for the Sound Management of Chemicals (IOMC)[2], the Stockholm Convention on Persistent Organic Pollutants (POPs), the Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade, and the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal.

4. Ensuring sound chemicals management is an important element of achieving the Millennium Development Goals (MDGs), including the goal on poverty eradication, given the critical linkages between chemical production and use and the major sectors of developing

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[1] E/CN.17/2010/15

[2] The IOMC (Inter-Organization Programme for the Sound Management of Chemicals) brings together nine intergovernmental organizations actively involved in chemical safety: FAO, ILO, UNDP, UNEP, UNIDO, UNITAR, WHO, World Bank and OECD.

economies such as agriculture, health, energy and industry. The main message from the eighteenth session of the Commission on Sustainable Development (CSD-18) is that significant but insufficient progress has been made in sound chemicals management at all levels. Serious incidents still occur and there are still negative impacts of chemicals on both human health and the environment. Much remains to be done to achieve the 2020 goal on sound management of chemicals.

5. The global production, trade and use of chemicals are increasing, with growth placing an increasing chemicals management burden on developing countries. As a result, significant changes are needed in the way societies manage chemicals. Due to the very nature of chemicals, future actions have to be approached from a sustainable development perspective.

6. Changing unsustainable patterns of production and consumption was considered in the Johannesburg Plan of Implementation (JPOI), among others, as a cross-cutting and overarching objective of, and essential requirement for sustainable development. From the perspective of a life-cycle approach, there are strong intersections between sound management of chemicals and sustainable consumption and production patterns, including in such area of actions as mainstreaming of practices for corporate social and environmental responsibility (CSER), responsible advertising, marketing and consumer information tools including labelling and certification, and scaling up work of consumer groups.

II. Policies for sound management of chemicals

A. Governance

7. The importance of sound management of chemicals for sustainable development is not sufficiently recognized by countries. As a result, chemicals management is not sufficiently integrated into the national development strategies and plans. The activities for the sound management of chemicals are in many developing countries not a priority in their development policies and consequently, are underfunded. A similar situation is also found in donor countries' policies for development assistance.

8. Chemicals management is a cross-sectoral issue that involves a number of ministries in national governments, together with a wide range of stakeholders. It remains a challenge to foster cooperation

among different actors both at the national and international level to ensure coherence, consistence and resource efficiency.

9. In many countries, the governance structure comprising national legal and institutional infrastructures for chemicals management is fragmented or incomplete, including an inconsistent involvement of the local authorities. There is a lack of national coordinating frameworks engaging relevant stakeholders in chemicals management, including the implementation of international agreements and processes**.**

10. Another challenge is that there continues to be a lack of implementation of the Rio principles on sustainable development in chemicals management. In the global effort to phase out hazardous chemicals, developing countries need more support from the international community in reshaping their economies towards sustainable development.

11. To be fully effective, policy options and measures on chemicals management should address the full policy chain of decision-making from identifying problems by assessing their root causes to proposing a coherent package of solutions, which will require a comprehensive regulatory and institutional framework rather than only technology oriented measures. The policy options on governance for sound management of chemicals should include to:

(a) Put sound management of chemicals as a priority in the broad context of development and environment strategies. To enhance the awareness of decision-makers on the importance of chemicals management for sustainable development, more guidance needs to be made available on how to link sound management of chemicals to health and poverty alleviation, how to measure and value the linkages and impacts, how to conduct assessments in a systematic manner, how to integrate such assessments into sectoral development plans and poverty reduction strategies, and how to address specific problems with strong linkages to development e.g. malaria control and application of certain pesticides;

(b) Establish or strengthen national coordinating frameworks engaging all relevant agencies and stakeholders in the sound management of chemicals, including the implementation of international agreements and processes, through a cross-sectoral, participatory and partnership-based set of interventions to promote proactive management of harmful substances and hazardous waste, and to avoid potential

problems rather than just respond to the negative impacts once they occur;

(c) Evaluate and strengthen legal and institutional infrastructures at the national level to ensure a coherent and efficient administrative system. There is in particular a need for focusing on the enforcement of laws and regulations;

(d) Strengthen institutional capacity of national governments to develop legislative and regulatory systems for the environmentally sound management of hazardous chemicals, including effective frameworks for chemical accident prevention and preparedness;

(e) Link the health and environmental sectors to address chemical safety, risk prevention and reduction, and avail of the WHO offices to strengthen coordination at the national and regional levels; and

(f) Implement the Rio principles including CBDR, the precautionary approach, polluter pays and internalization of environmental costs, and develop economic instruments to promote sound management of chemicals throughout their life-cycle.

Box 1: Key components of a sound management of chemicals governance framework

- Constitutional provision (health; quality of life; environment; sustainable development)
- Enabling policy and legislative framework
- Mechanism for national coordination
- National plans and priorities
- Stakeholder participation, including women, indigenous communities, workers, and other vulnerable groups
- National infrastructure and government institutional capacity for risk assessment and management
- Basic information for risk management, to inform decision-making and for tracking progress such as:
  - Information on chemicals imported, manufactured, formulated, in transit, and traded
  - Clinical, epidemiological, and environmental data
  - Toxicity, fate, distribution, and pathways of exposure
- National monitoring strategy to support assessment and basic information for decision-making and monitoring of human populations, food (including animal feeds) and the environment (including air, water, soil, sediment, flora, and fauna)
- Risk communication strategies for awareness raising and outreach, and education to support risk prevention and reduction (accessible, timely, and appropriate information, including as applicable to vulnerable groups)
- Support for research
- Financial resources

Source: UNDP Technical Guide for Integrating the Sound Management of Chemicals in MDG-Based Policies & Plans, 2009

B. Information sharing

12. Information exchange and effective communication throughout the life-cycle of chemicals is a key to enable users to avoid exposure to hazardous chemicals and to manage risks to users and the environment. Progress has been made in this area: about 50 countries either have or are developing a national or regional pollutant release and transfer register (PRTR) system[3]; the legal instruments implementing the Globally Harmonized System of Classification and Labelling of Chemicals (GHS) have entered into force in many countries; and the prior informed consent procedure (PIC) is implemented through the Rotterdam Convention. The information networks on chemicals at the international level have been established by relevant agencies and multilateral conventions, such as the clearing house being developed and managed by SAICM; the clearing house under the Basel, Rotterdam and Stockholm Conventions; the International Chemical Safety Cards (ICSCs) produced and updated by WHO and ILO; and the Global Portal to Information on Chemical Substances (eChemPortal) hosted by OECD.

13. Although more information on chemicals has become available and more easily accessible since WSSD, there is still significant room for improvement. CSD-18 particularly identified that the information and data on chemical safety and toxicity, especially in national and local languages, is still insufficient. There is furthermore insufficient information sharing on alternatives to toxic chemicals, which is especially important to developing countries and countries with economies in transition. Countries also have insufficient capacity to interpret and utilize information on chemical safety and toxicity.

14. On the ongoing work of PRTR, many countries pointed out that a lack of institutional capacity to implement PRTR and a deficiency in laboratory infrastructure are major barriers to the ratification or accession to the instrument.

15. Another challenge identified in CSD-18 is insufficient information on chemicals in products. The increasing presence of toxic chemicals in products poses risks to human health and the environment during use and when they are recycled or become wastes. Harmful chemicals in products also have become a global problem through international trade. Examples include children's toys, textiles, jewellery, electronics and furniture.

[3] 2009 OECD survey of the implementation of ECE Recommendation C (96)41/Final on PRTR.

Vulnerable groups such as children and pregnant women are at particular risk from exposure to a variety of substances contained in products. Yet there is no global system for providing information on chemicals in products to consumers and others.

16. The second session of the International Conference on Chemicals Management **(**ICCM2**)** held in May 2009 identified chemicals in products as an emerging issue. In its resolution[4], ICCM2 foresees the development of a project to address the improvement of information in relation to chemicals in products, and encourages stakeholders to provide support to the project, both in substantive and resource terms.

17. The fourth session of the Conference of the Parties to the Stockholm Convention held in May 2009 added nine new chemicals for elimination and restriction, including industrial chemicals widely used in products and articles.

18. For effective and efficient information generation and sharing, cooperative action is needed at all levels to:

(a) Further implement the GHS, establish national PRTRs, participate in and implement the PIC procedure, make full use of existing international and regional information networks and provide related training and technical assistance to developing countries and countries with economies in transition;

(b) Improve knowledge, training, education and awareness of all national stakeholders including experts, legislators, politicians, policy makers, farmers, workers, producing and manufacturing companies and public and national organizations on the sound management of chemicals along the value-chain;

(c) Implement the principle of "no data, no market" and integrate the acquisition, management and dissemination of information related to hazardous substances in the process of developing and marketing chemicals. Universal access to this information and knowledge is essential to the development of prevention and protection tools. This includes assessing the hazardous properties of chemicals and strengthening screening and evaluation systems for new chemicals entering the market;

[4] ICCM resolution II/4.

(d) Strengthen the community's right to knowledge through product labels, environmental reports, environmental impact assessments, eco-audits, emission inventories and similar instruments. Data relevant to the health and environmental impacts of chemicals should be made available to the public;

(e) Disseminate information on chemical content of products and the impact on human health. Further initiatives for promoting producer responsibility for providing clear and accessible information to the public on chemicals in products are needed;

(f) Promote universal access to reliable information on hazardous substances through the adoption of a global system for communicating risks and hazards**;**

(g) Develop global networks to facilitate the sharing of good practices, methodologies, interventions, approaches and results of research to improve the sound management of hazardous substances;

(h) Strengthen the regional information exchange networks supported by UNEP;

(i) Strengthen information sharing including research findings on chemical toxicity between developed and developing countries; and

(j) Strengthen information exchange on safe and accessible alternatives to toxic chemicals.

C. Chemical safety, risk prevention and reduction

19. Chemical safety, risk prevention and reduction are crucial for reaping the benefits of chemicals without suffering their negative effects on the environment and human health.

20. The main sources for chronic chemical pollution include the agricultural use of pesticides, release from energy generation and industrial activities, and obsolete stocks of outdated chemicals.

21. Vulnerable groups in developing countries such as children, women, indigenous people, the poor and workers suffer disproportionate impacts from chemical exposure due to, among others, high exposure levels from water, food, location of dwelling, occupational circumstances as well as lack of understanding on the needs to protect themselves and others from the chemical risks.

22. Consumption of chemicals in developing countries is growing at a higher rate than in developed countries, and could account for a third of global consumption by 2020. Without sound management of chemicals, this trend will lead to increased pollution and negative effects by chemicals. Moreover, the risk posed by a chemical in one country may affect other countries due to the potential for environmental transport in air, in water and in migratory species.

23. Many developing countries lack basic legal, institutional and human capacities and knowledge to perform adequate chemical risk assessment and management. In many developing countries, increasing agricultural production is a top priority in their development plans, which often leads to increased use of pesticides. However, those development plans rarely contain provision for effective assessment and management of pesticides and the alternative methods such as integrated pest management and organic production. Furthermore, pesticides are in many cases imported illegally and repackaged without any labelling on proper handling, creating exposure risks for the users.

24. A large proportion of industrial activities involving chemicals in developing countries are carried out by national companies and/or small and medium sized enterprises (SMEs). These companies and enterprises very often lack human and technical capacity to adopt the tools and methodologies for ensuring protection of workers and safety of processes and products which are used in larger-scale industries in developed countries.

25. There is presently a lack of guidance for industrial uses of chemicals. Considering the present trends with an increased production and use of chemicals in developing countries, this is becoming an urgent need. Countries need internationally agreed guidance and standards that are coherent, complementary and consistent and targeted to specific sectors.

26. It should be noted that small island developing states (SIDS) are increasingly vulnerable to the transboundary movement of hazardous wastes and chemicals which originate from land-based and ship-borne sources primarily from outside their exclusive economic zones. Given their ecological fragility, high dependence on coastal and marine resources and low environmental and socioeconomic carrying capacities, the magnitude of the chemical risks for SIDS is greater than for others.

27. There exist numerous tools for risk assessment and management. However, these tools have been developed by the developed countries for their particular circumstances. Therefore, there is a need to adapt and develop assessment tools and methodologies that fit the national environmental, ecological and socio-economic conditions relevant to chemicals management in developing countries and countries with economies in transition.

28. The reliance of countries on hazardous chemicals has demonstrated the need for the development of safe alternatives that can substitute the harmful chemicals or alternative approaches that reduce the use and release of chemicals.

29. Effective policies and measures for chemical safety, risk prevention and reduction depend on a number of activities, such as to:

(a) Increase awareness on the importance of chemicals safety among decision-makers at the national and local levels, as well as among the private sector, civil society and users of chemicals. This is a prerequisite for national priority to be given to the development of necessary measures to prevent and reduce the negative effects of chemicals on the environment and human health;

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(b) Establish a functioning regulatory system to set out rules for registration, evaluation and restriction in the use of chemicals. The regulatory system needs to cover the whole life-cycle for chemicals including production, transport, use, recycling and disposal of chemicals. The regulation of the marketing of chemicals is critical. The regulatory framework should incorporate the implementation and enforcement of international legally binding instruments, such as the ILO conventions and MEAs on chemicals and waste, as well as voluntary standards and agreements such as the International Code of Conduct on the Distribution and Use of Pesticides;

(c) Develop legislation on liabilities and compensation for environmental damages as a supplement to the traditional legislative approach on chemicals management. The use of innovative market based instruments could be considered for their ability to help reduce the use of harmful chemicals;

(d) Strengthen national human capacity for technical assessments and management of chemicals throughout their life-cycle. This requires extensive training of staff, including the enforcement officers, inspectors and custom officials;

(e) Develop necessary laboratory capacity for monitoring of the occurrence and effects of chemicals in the environment. This could be done through regional and sub-regional cooperation in order to decrease the demands on individual national budgets;

(f) Speed up activities to address the existing stocks of obsolete chemicals that are polluting the environment. Countries need to design proactive strategies to avoid future accumulation of large stocks of chemicals when they are banned or taken off the market;

(g) Foster industry and academia research on safer alternative products and technologies for replacing the use of hazardous chemicals and promote more sustainable approaches such as integrated pest management and organic farming methods;

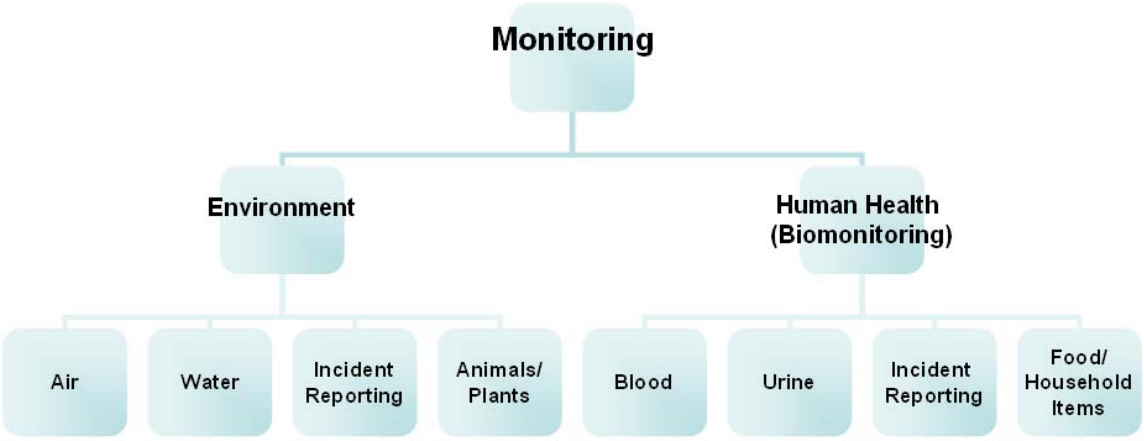
(h) Asses existing methods at the international level for chemical risk assessment and management and adapt them to the needs of developing countries and countries with economies in transition. It should be considered to develop international codes and standards for industrial chemicals similar to the International Code of Conduct for Distribution and Use of Pesticides. These initiatives could build on existing materials and approaches such as the GHS, PRTRs and make use of national and regional experiences. IOMC organizations should consider working together to provide countries with such coherent guidance and standards for industrial chemicals.

D. Monitoring

30. The huge quantities and varied characteristics of chemicals being produced, traded and used mean it is not practicable to monitor all these chemicals in the same way. The chemicals that are of most concern are those that are hazardous, persistent in the environment, and travel long distance in the environment from where they are released.

31. Current monitoring programmes fall largely into two categories: monitoring environment impacts and monitoring human health impacts (bio-monitoring). Environmental monitoring indicators include soil, air, water, incident reporting, animals and plants. Bio-monitoring indicators include human milk, blood, urine, incident reporting, food and other household products. For example, a monitoring programme can be routine sample checks to determine level of heavy metals in raw materials such as meats.

Figure 1: Indicators used to monitor chemicals



32. Information on monitoring methods exists in forums and scientific literature, including reports from the WHO and UNEP. Environmental monitoring information is mostly accumulated through the International Society of Exposure Science and its journal, Journal of Exposure Science and Environmental Epidemiology. There is no centralised database for bio-monitoring methods but information and data are scattered across different topics. The WHO, UNEP and other chemical related agencies and multilateral conventions, such as the Stockholm Convention, are involved in monitoring of chemicals. The World Bank also provides financial and human resource support to relevant programs. Stakeholders such as NGOs are also involved in bio-monitoring. For example, the European Centre for Ecotoxicology and Toxicology of Chemicals (ECETOC), a scientific and non-profit association, provides guidance for interpretation of bio-monitoring data.

33. At the national level, there are big discrepancies in the implementation of monitoring programmes between developed and developing countries. With allocated resources and analytical capacity, developed countries have undertaken extensive monitoring of chemical pollutants. For example, the European Monitoring and Evaluation Program monitors and reports POPs as monthly mean concentration to assess trans-boundary air pollution. The presence of chemical pollution has often been noted in developing countries but effective monitoring programmes which will generate meaningful data are often lacking. There are also differences between academic networks and government networks for environmental monitoring; these could be better linked.

34. The overall challenges facing monitoring include: monitoring of general effects of chemicals on human health and environment is extremely difficult as the effects of chemicals might be confounded by other effects; there is a lack of monitoring of the potential risks of chemicals throughout their life-cycle; there are insufficient monitoring data on chemical contamination of environmental media and on human exposure; and there is the need to expand the current list of indicators.

35. More efforts should be put to develop monitoring programmes that specifically address each point of the chemical life-cycle. The policy options on strengthening monitoring should include to:

(a) Further develop monitoring indicators. This requires more investment in technological advancements in terms of monitoring techniques and detection mechanisms to make monitoring of chemicals more accessible;

(b) Better use existing data and data extrapolation in developing best practices and increase the access to information gathered from the monitoring. There is a need to develop a centralised database with relevant information for each category of chemicals and the best practices in monitoring them. There is also a need to bring together public health and environment experts and activities under a comprehensive integrated surveillance and monitoring system;

(c) Expand monitoring programmes in a coordinated manner as well as sustain existing programmes with adequate resources. For example, the Global Monitoring Plan of the Stockholm Convention to assess POP levels needs to be sustained so that progress can continue to be assessed;

(d) Strengthen regional or bilateral cooperative activities as chemicals can travel large distances. Fruitful cooperation is exemplified by the Arctic Monitoring and Assessment Programme;[5]

(e) Increase and sustain analytical capacity in developing countries. Human resources can be strengthened via better communication among existing programmes in developed countries; there should be development or strengthening of centres and networks of expertise as well as developing training programmes to improve expertise in developing countries. Programmes such as intercalibration to enhance

[5] The Arctic Monitoring and Assessment Programme involves Canada, Denmark, Iceland, Sweden, Norway, Finland, Russia and US (Alaska).

quality assurance and quality control as well as to facilitate global comparison of data should be promoted; and

(f) Prioritize what specific chemicals to monitor by comparing the effects of different hazardous chemicals.

E. Emerging issues

36. Apart from the traditional hazardous chemicals, some emerging areas attract great attention. The ICCM2 in May 2009 identified nanotechnology, electronic waste (e-waste), chemicals in products and lead in paint as "emerging policy issues". They are not sufficiently recognized or addressed and pose existing or potential risks to human health and the environment.

37. In CSD-18, particular concern was expressed on nanotechnology. Participants pointed out that too little is known about the potential risks of nanomaterials, which are already used in a wide range of domestic and industrial products and food. The United Kingdom's Royal Society recommended that, given the emerging evidence of serious nanotoxicity risks, nanoparticles should be treated as new chemicals and be subject to new safety assessments prior to their inclusion in consumer products.

38. E-waste is another major concern, particularly in developing countries. Although some work to address this emerging issue has been undertaken by various international organizations, in particular under the Basel Convention, more needs to be done especially in minimizing the use of hazardous chemicals in e-products.

39. Various governmental agencies are developing new test methods in order to assess emerging health and environmental risks of chemicals. However, this work takes place mainly in the developed countries. There was a strong call in CSD-18 to strengthen cooperative action, and this should involve developing countries. There was also an emphasis on following a precautionary approach on emerging issues.

40. The ICCM2 has made some progress in this area. Its resolution[6] envisages the establishment of a global partnership on lead in paint. It also foresees the development of a project to address the improvement of information in relation to chemicals in products. For further consideration of issues in relation to electrical and electronic products, a workshop is to be convened for which the Conference invites

[6] ICCM2, resolution II/4

stakeholders to provide expertise and resources. On nanotechnology, the resolution encourages stakeholders to provide assistance to developing countries and countries with economies in transition to enhance required capacity, invites stakeholders to work together on research, and requests them to facilitate access to and share information. In addition, the Conference agreed to establish a contact group to discuss the institutional arrangements for the intersessional period of the ICCM, including those needed for future work on emerging policy issues.

41. The emerging issues merit concerted actions at all levels, including to:

(a) Strengthen research and risk assessment on the emerging issues to reduce chemical risks, including new chemicals under MEAs, e-waste and nanotechnologies;

(b) Use ICCM, the governing body of SAICM, to focus attention and call for appropriate action on emerging issues as they arise and forge consensus on priorities for cooperative action;

(c) Support existing programs and projects on emerging issues, such as the contact group of SAICM on emerging policy issues, the SAICM's workshop on electrical and electronic products to be implemented by the Basel and Stockholm Conventions and UNIDO, the partnership between UNITAR and OECD in addressing awareness-raising and development of capacities in developing countries and countries with economies in transition on nanotechnology and manufactured nanomaterials, and the OECD-IOMC work on the management of perfluorinated chemicals and the transition to safer alternatives; and

(d) Strengthen related information sharing between countries.

F. Partnerships

42. Environmentally sound management of chemicals is reliant on the participation of all stakeholders. Decisions made with the involvement of relevant stakeholders, including NGOs, civil society and the private sector, are much more likely to be put into practice successfully. Not only do these actors provide access to a wide range of expertise, they also provide pertinent local information from which to assess policy options. They may perform monitoring and data collection as well as carrying out community outreach, public education and awareness raising activities.

43. However, the growing acknowledgement of the important role of these stakeholders in chemical policy and management has not been matched with their effective involvement in the policy development processes. In some countries, there is a lack of government support for public participation in the decision-making process, and resources provided for stakeholder related activities are minimal or difficult to access.

44. There is a need for strengthened partnerships between the national governments, private sector, research institutions and civil society for sound management of chemicals, and a need for more financial, technical and capacity support to public interest NGOs and civil society organizations to enable and facilitate their responsible and active participation in policy development processes. The future actions should include to:

(a) Strengthen cooperation with civil society, academia and scientific societies and other stakeholders and encourage their contributions to sound chemicals management;

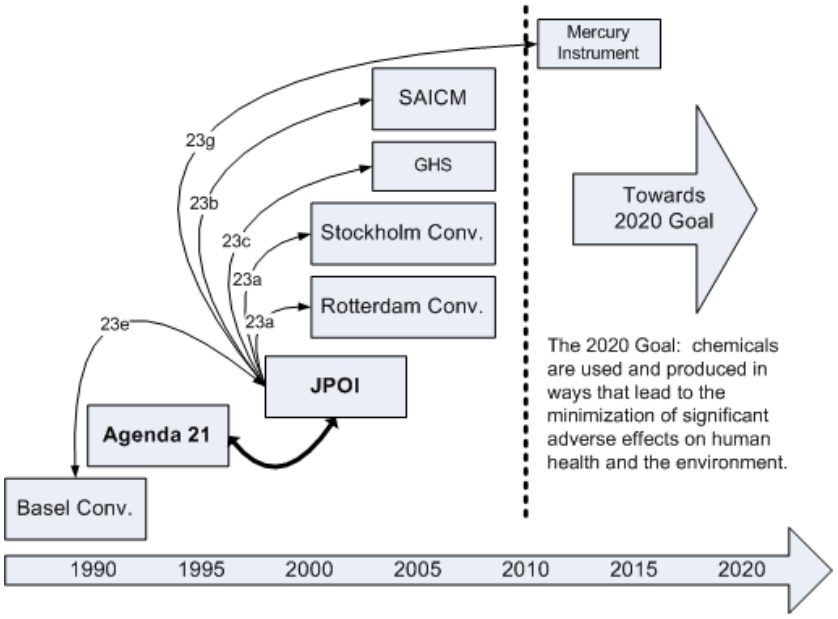
(b) Foster public-private partnerships in order to strengthen capacity of national industry and small and medium enterprises (SMEs) for the safe and responsible use and handling of chemicals, including hazardous ones;

(c) Establish partnerships for assessing and communicating chemical risks and hazards, drawing on examples such as the Responsible Care Global Charter and the Global Product Strategy; and

(d) Promote the role of industry in information sharing and implementation of the precautionary approach to chemical safety, strengthen responsible advertising and marketing, and implement the principle of "no data, no market", and mainstream practices for Corporate Social and Environmental Responsibility (CSER) in the chemical industry.

III. Strengthening implementation framework and enabling environment

Figure 2: A clear vision - towards the 2020 Goal



A. International policy framework: Strategic Approach to International Chemicals Management

45. The initial commitment to SAICM implementation, as evidenced in high-level endorsements, nomination of national focal points, preliminary progress reports and the extensive portfolio of Quick Start Programme projects, has been encouraging. Challenges to full implementation of SAICM, which offers a non-legally binding international policy framework, include the lack of resources needed for capacity-building, institutional strengthening and other activities, uneven engagement across key sectors, and the difficulty of monitoring progress on a continuous basis.

46. The financing of the SAICM secretariat and the SAICM Trust Fund for the Quick Start Programme (QSP) have been based on voluntary contributions which are very sensitive to the priorities of donor countries and might change over time. At present, the major contributions to the QSP have been limited to a few donor countries or regional economic cooperation organizations. It will be a challenge during the lifetime of SAICM to finance the necessary activities.

47. The Global Environment Facility (GEF) has opened up a funding window for SAICM related activities. However, this only covers a very small fraction of what is needed for a full implementation of SAICM.

48. The International Conference on Chemicals Management (ICCM) decided at the adoption of SAICM that the Trust Fund for QSP will expire by 2013 with the last disbursement of funds in 2012. However, the need for funds to support sound management of chemicals under SAICM will not expire at that time. A replacement of the SAICM QSP needs to be found with a longer term approach supported financially.

49. Recognizing that chemicals are a cross-sectoral issue, SAICM represents an attempt to move beyond the environment and to include all sectors of relevance for sound management of chemicals. This has only happened to a small degree at the international level, as the governing body of SAICM, the ICCM, is still dominated by the ministries of environment and health. Most of the other sectors, including the development sectors, are absent from the ICCM.

50. Existing mechanisms such as the IOMC have proved effective in maintaining coordination in SAICM related activities at the international level and increasingly in partnerships boasting implementation and impact. However, the engagement of regional organizations and financial institutions has been uneven and insufficient. At the national level, the inter-Ministerial committees encouraged in the SAICM Overarching Policy Strategy have been established in some countries but inter-sectoral coordination appears lacking in many cases.

51. On future policy options and measures to ensure an enabling international environment for the sound management of chemicals, there is a continuing need to:

(a) Strengthen the international policy framework for chemicals, including through full and effective implementation of SAICM. The third session of the ICCM in 2012 will be the next major opportunity to take stock of SAICM implementation and renew momentum behind it, as well as to consider additional emerging policy issues;

(b) Further enhance coordination, coherence and synergies between existing institutions and processes on chemicals, including the coordination between CSD and other bodies and agencies. The

outcomes of the discussion of CSD need to be transmitted to other fora dealing with chemicals;

(c) Consider and pay increased attention to the possible need for international structures to evolve or be supplemented beyond the lifetime of SAICM in 2020. This might include the possibility to develop a global structure for implementing policy actions on chemicals of concern and to promote a proactive approach to the management of chemicals. Discussion of such matters will likely feature prominently at the fourth and fifth sessions of the ICCM in 2015 and 2020, respectively. In the meantime, CSD-19, the international environmental governance process, including the meetings of UNEP's Governing Council, and the United Nations Conference on Sustainable Development (Rio20) may provide opportunities for initial debate.

B. International legal framework

52. Progress in the implementation of the legal agreements on chemicals and wastes, such as the Basel, Rotterdam and Stockholm Conventions, has been observed through a number of indicators, such as an increase in ratification, good transmission rate of national implementation plans under the Stockholm Convention, number of new chemicals reviewed and listed under the Stockholm and the Rotterdam Conventions, and import responses under the Rotterdam Convention.

53. A number of challenges are still hampering a wider implementation of these international instruments at the national level. Difficulties faced by country Parties relate to the insufficient use of market-based mechanisms, inadequate legal and technical capacity, lack of access to affordable and safer technologies and alternatives, and especially the need for prioritizing and integrating chemicals strategies into national development plans.

54. The weakness in regulatory infrastructure, particularly enforcement mechanisms for chemicals management in developing country Parties and Parties with economies in transition, has been identified as one of the major challenges to the implementation of the conventions. There is in many of these countries a fragmented and inconsistent implementation of the legal framework which leads to a lack of cooperation and synergies among the legal agreements at the national level. In addition, access to adequate and sustainable financial resources is still one of the main barriers to the implementation and enforcement of the international legal instruments.

55. At the international level, the Extraordinary Conferences of the Parties for the Basel, Rotterdam and Stockholm Conventions (Ex-COPs) on the synergies between the three conventions held in Bali in February 2010 recognized that the overarching goal of the three conventions is the protection of human health and the environment and the promotion of sustainable development, and the objective of enhanced coordination and cooperation among the three conventions is to contribute to the achievement of that goal. The Ex-COPs and the process to enhance cooperation and coordination among the three conventions provides an encouraging example to other parts of the global environmental agenda that enhanced international environmental governance can take place within a cluster of related multilateral environmental agreements. Joint activities among the secretariats are being developed and implemented with the specific mandate to produce benefits to Parties at the national level which would improve their ability to meet their obligations under the conventions.

56. A general challenge for chemicals management and the related international legal framework is the limited number of chemicals covered by the international agreements. This is attributable to the need for international consensus that those chemicals are proven to be unsafe and of global concern before they can be addressed at the international level. This leads to long negotiation periods between the establishment of the scientific evidence and the actual actions taken, but is counterbalanced by the advantage of promoting strong information exchange and guidance on the chemicals reviewed, including proven effects on human health and the environment as well as potential alternatives to be phased in. The review process taking place under the scientific committees of the Conventions also enhances the buy-in of country Parties to take action on chemicals that have been carefully reviewed.

57. The delivery of timely and appropriate technical assistance and the transfer of technology are recognized as essential for the implementation of chemicals and waste legal agreements at the national level. Under a number of agreements, regional and subregional centres for capacity-building and transfer of technology have been established and mandated to assist States Parties to implement their obligations under the Conventions. Those centres offer assistance in a wide range of areas such as: research for the development and introduction of alternatives; laboratory capacity, e.g. to assess chemicals risks and monitor levels of contamination; development of regulatory and enforcement schemes.

58. On future actions towards an effective international legal framework for sound management of chemicals, policy measures and actions should be taken to:

(a) Mobilize financial resources at all levels, both public and private, to support the ratification, implementation and enforcement of legal instruments for chemicals management and hazardous waste, especially the above conventions;

(b) Integrate chemicals management and implementation of the internationally legally binding instruments into national development plans, in order to ensure bilateral and national funding for the implementation and enforcement of the conventions as well as catalyse initiatives and partnerships to enhance technical and financial assistance to developing countries, including support from industry;

(c) Foster cooperation and coordination among the three conventions at the national level and ensure national synergies in implementation and enforcement of the conventions. This could be achieved through a revised mandate of the national coordination mechanisms already established at the national level to foresee further collaboration between the ministries involved in the implementation of conventions and the general chemicals agenda. It would be important for the coordination mechanism to include the main economic and planning ministries in order to ensure their support for the implementation of the conventions;

(d) Successfully implement the obligations pertaining to the newly listed chemicals to the Annexes A, B and C of the Stockholm Convention including the nine chemicals that have entered into force on 26 August 2010;

(e) Successfully ratify the Ban amendment under the Basel Convention that bans hazardous wastes exports for final disposal and recycling from Annex VII countries (Basel Convention Parties that are members of the EU, OECD, Liechtenstein) to non-Annex VII countries (all other Parties to the Convention);

(f) Successfully negotiate the globally legally binding instrument on mercury. In addition to the existing legal instruments, the international community, at the beginning of 2009, decided that a legally binding instrument on mercury would be developed. The goal is to develop such an instrument by 2013; and

(g) Raise awareness of the public and decision-makers through initiatives such as the Green Customs Initiatives and POPs-free products, and through international campaigns such as the "Safe Planet" campaign[7].

C. Means of implementation

59. The SAICM and the international legal agreements on chemicals and wastes recognized that the extent to which developing countries can make progress towards the sound management of chemicals and wastes, including to meet the WSSD goal, depends in part on the availability of financial resources provided by governments, the private sector, as well as bilateral, multilateral and global agencies or donors. This is an issue which was reconfirmed at the CSD-18 and each meeting of the Conference of the Parties of the chemicals and wastes conventions and meetings of ICCM.

60. The requirement for financial resources can clearly be seen in the projection of financial needs, estimated at 9 billion dollars[8], for national implementation plans on the first 12 POPs under the Stockholm Convention. These resource requirements will need to be mobilized well beyond the resources available for GEF.

Table 1: Stockholm Convention summary of full resource estimates for 68 parties in four regions (Million USD)[9]

Region	2004-2009	2010-2014	2015+	Regional Totals
Africa	836.85	729.11	502.08	2,068.04
Asia and Pacific	2,088.64	3,430.40	676.80	6,195.84
Central and Eastern Europe	292.71	242.38	132.84	667.93
Latin America and the Caribbean	118.28	86.88	22.40	227.56
Period totals	3,336.48	4,488.77	1,334.12	9,159.37

61. At present, a disproportionately small portion of bilateral and multilateral funding is allocated to national efforts to implement sound management of chemicals, because such initiatives are rarely featured

7 Safe Planet: the United Nations Campaign for Responsibility on Hazardous Chemicals and Wastes is the UNEP and FAO-led global campaign for ensuring the safety of the environment and human health from toxic chemicals and wastes. For more information: ***http://www.facebook.com/safe.planet***

8. This number does not reflect countries that have not yet ratified the convention nor the additional POPs that have been added to the Stockholm Convention. Thus, while some numbers might be rough estimations, it is also true that not all numbers have been gathered.

9 Reproduced from UNEP/POPS/COP.4/27. *Assessment of funding needs for Parties that are developing countries or countries with economies in transition to implement the Stockholm Convention for the period 2010–2014*.

and mainstreamed as national priorities in development plans and national assistance strategies.

62. Due to lack of funding, most developing countries do not have the technical and analytical capacities for development, implementation and enforcement of chemicals management programmes. There is a lack of trained scientific, legal, administrative personnel, enforcement officers and custom officials. There is furthermore a lack of the necessary institutional structures such as laboratories for the sound management of chemicals.

63. The means of implementation should be further strengthened in order to achieve the goal of the sound management of chemicals. The actions should include to:

(a) Mobilize financial resources at all levels, both public and private, to support the transition to sound management of chemicals. In the short and mid term time horizon, specific proposals for new financing arrangements could include a multilateral fund for chemicals such as the one of the Montreal Protocol on Substances that Deplete the Ozone Layer, transforming SAICM's QSP into a permanent funding arrangement during the life time of SAICM, as well as expanding the funding for the chemicals focal area in GEF. However, sustainable funding of chemicals management in the long term has to come from national funding. This implies both greater support to mainstreaming sound management of chemicals within national development plans and strategies and greater use of economic instruments to sustain national funding for chemicals management related policies and measures;

(b) Support the ongoing initiative[10] of the Executive Director of UNEP on a consultative process to identify financing options for the chemicals and wastes agenda;

(c) Strengthen regional and sub-regional centres for capacity-building and transfer of technology established under the three conventions;

(d) Foster public-private, North-South and South-South partnerships to strengthen capacity of national industry and small and medium enterprises (SMEs) for the safe and responsible use and handling of chemicals, including hazardous ones;

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[10] As adopted by the 11th meeting of the Governing Council/Global Ministerial Environment Forum on 24-26 February 2010 (decision SS.XI/8).

(e) Provide a coherent package of decision-making tools and guidance along with a set of scientifically based economic arguments that make a convincing economic case for investing in the sound management of chemicals;

(f) Develop and transfer technology of safe substitutes and develop capacity for the production of such substitutes, particularly in developing countries;

(g) Consider establishing a system to prevent transfer of obsolete technologies to developing countries and promote the co-operative development of environmentally sound technologies;

(h) Consider establishing an international mechanism, in collaboration with regional and sub-regional centres established under the conventions as well as UNEP and FAO regional offices, to support education and capacity building for the sound management of chemicals aligned with the implementation of SAICM and the three main conventions on chemicals; and

(i) Strengthen human and technical capacity for risk assessment, reduction and monitoring in both government and public interest organizations, and provide assistance to developing countries.

IV. The way forward

64. The projected growth in chemicals production and use in particular in the developing world and countries with economies in transition is likely to result in greater negative effects on health and the environment if sound chemicals management is not put in place. The gap between policy formulation and what happens in practice needs to be resolved at the international, regional and national levels.

65. A strong national infrastructure for the sound management of chemicals should be established. Countries need to mainstream priorities of sound management of chemicals into MDG-based national development planning processes, and move forward to form and strengthen their inter-ministerial committees with multi-stakeholder participation, name national focal points, develop and implement their national plans under the SAICM, the Rotterdam and Stockholm Conventions, and other chemicals related instruments.

66. A life-cycle approach should be adopted, and the commitment to basic principles such as the precautionary and polluter pays principles; no data, no market; public right to know; and progressive substitution of the most dangerous chemicals should be strengthened.

67. There is also a need to seek and address interlinkages between chemicals and other environmental domains such as with climate change, biodiversity, land degradation and water resources in order to reinforce the contribution of global action for sound management of chemicals to achieving sustainable development

68. Legislation to require producers and importers to improve the safety of their products, and the monitoring and enforcement of existing regulations should be enhanced. Information in relation to chemicals in products should be improved.

69. The institutional capacity of national governments to develop legislative and regulatory systems for the environmentally sound production and use of hazardous chemicals, including the effective frameworks for chemical accident prevention and preparedness, should be strengthened.

70. Clear and concise indicators, including goals, targets and timelines of what countries want to achieve on sound chemicals management, should be developed, with priorities spelt out clearly in the national development plan.

71. Research and promotion of alternatives to toxic and persistent chemicals should be strengthened. Existing information on safe and accessible alternatives, e.g. guidance developed by the scientific committee of the Stockholm Convention, should be widely disseminated to countries to assist them when developing and implementing their regulatory and enforcement framework.

72. Public health could be improved through emphasizing the need to engage fully the health sector in national, regional and international strategic approach forums and in the national inter-ministerial processes. Strategies directed specifically at the health of women, children and workers should be developed.

73. Environment and health sector managers should become more effective partners in the development planning process, including in the area of sound chemicals management, in terms of providing timely

information and converting technical data into usable forms of information for decision-makers.

74. The sound management of hazardous substances in the workplace is essential in reducing their impact on the environment, workers and industry. Countries need to implement the main ILO chemicals-related Conventions, namely the Chemicals Convention, 1990 (No. 170) and the Prevention of Major Industrial Accidents Convention, 1993 (No. 174).

75. To enhance information sharing and accessibility, implementation by Member States of the GHS remains a priority. The establishment of a global system for communicating risks and hazards is necessary. Information flow including research findings on chemical toxicity between developed and developing countries should be enhanced. To establish an international mechanism to support education and capacity building for the sound management of chemicals should be considered.

76. Chemical safety should become an important part of national policy. Highly hazardous pesticides should be addressed through implementing the International Code of Conduct on the Distribution and Use of Pesticides. A pesticide authorization system should be established at the national level. The international codes and standards for industrial chemicals should be developed. Countries need to address existing stocks of obsolete chemicals while take proactive strategies to avoid the development of future new obsolete stocks of chemicals.

77. Increased cooperation between countries is needed to prevent the transfer of the negative impacts of chemicals from one region to another and to stop repeating mistakes of the past. For that, an option is to enhance the use of PIC procedures between countries as provided by the Rotterdam and Basel Conventions. Technical assistance to developing countries and countries with economies in transition is a key. Countries also should build and strengthen capacity to deal with poisonings and chemical incidents.

78. The link between chemical safety, risk prevention and reduction and sustainable development should be fully reflected in the funding decisions of bilateral development assistance cooperation agencies. Donors need to recognize and encourage the inclusion of chemical safety objectives as important elements of development cooperation. Meanwhile, countries need to integrate fully the objectives of sound management of chemicals into national plans and corresponding budgets. Expanding the funding for the chemicals focal area in GEF

should be considered. A permanent and sustainable SAICM financial mechanism to replace the QSP Trust Fund should be established.

79. The existing international instruments and programmes, including the key chemicals conventions such as the ILO Chemicals Convention as well as the Stockholm, Rotterdam and Basel Conventions, should be fully implemented. Coherence and synergies among these instruments should be enhanced at all levels, including through the coordination among focal points for the conventions and the SAICM and through greater use of the regional centres established under the conventions.

80. Actions on emerging issues, such as e-waste and nanotechnologies, should be strengthened, including through more cooperation on research, risk assessment and information sharing between countries.

81. The international policy and legal framework for chemicals should be further strengthened, including through full and effective implementation of SAICM, successful negotiation of the globally legally binding instrument on mercury, examination of the usefulness of broader chemical legal instruments, and development of international structures for sound management of chemicals post-2020.