




Capacity Building Needs and Priorities

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Areas of capacity building

Broad areas in which capacity is needed

- Institutional capacity
- Human resources capacity development and training
- Risk assessment and other scientific and technical expertise
- Risk management
- Public awareness, participation and education in biosafety
- Information exchange and data management including participation in the Biosafety Clearing-House
- Scientific, technical and institutional collaboration at subregional, regional and international levels
- Technology transfer
- Identification of LMOs, including their detection
- Socio-economic considerations
- Implementation of the documentation requirements under Article 18.2 of the Protocol
- Handling of confidential information
- Measures to address unintentional and/or illegal transboundary movements of LMOs
- Scientific biosafety research relating to LMOs
- Taking into account risks to human health
- Liability and redress

Needs and priorities

Specific needs and priorities

• Development of a national biosafety policy

Extent of implementation

- Partially addressed

Preferred means

- Funding support
- Conferences and other fora
- Technical assistance and advice

Major target groups

- Decision / policy-makers (e.g. Ministers)
- Government regulators / administrators
- General public

• Development of national biosafety laws and regulations

Extent of implementation

- Adequately addressed

Preferred means

- Education and training
- Funding support
- Technical assistance and advice

Major target groups

- Decision / policy-makers (e.g. Ministers)
- Government regulators / administrators
- General public

• Guidance on mainstreaming of biosafety into other sectors

Extent of implementation

- Partially addressed

Preferred means

- Education and training
- Funding support
- Technical assistance and advice

Major target groups

- Decision / policy-makers (e.g. Ministers)
- Government regulators / administrators
- Interest groups (consumer groups, farmers, NGOs, etc.)

• Development of a national liability and redress regime

Extent of implementation

- Not addressed

Preferred means

- Education and training
- Funding support
- Technical assistance and advice

Major target groups

- Decision / policy-makers (e.g. Ministers)
- Government regulators / administrators
- Interest groups (consumer groups, farmers, NGOs, etc.)

• Support for implementation of the national biosafety framework

Extent of implementation

- Partially addressed

Preferred means

- Funding support
- Exchange programmes, internships, study tours, etc.
- Technical assistance and advice

Major target groups

- Decision / policy-makers (e.g. Ministers)
- Government regulators / administrators
- Interest groups (consumer groups, farmers, NGOs, etc.)

• Streamlining of regulatory systems related to biosafety

Extent of implementation

- Partially addressed

Preferred means

- Education and training
- Funding support
- Conferences and other fora

Major target groups

- Decision / policy-makers (e.g. Ministers)
- Government regulators / administrators
- Interest groups (consumer groups, farmers, NGOs, etc.)

• Tools for enforcement of biosafety laws and regulations

Extent of implementation

- Partially addressed

Preferred means

- Education and training
- Funding support
- Technical assistance and advice

Major target groups

- Government regulators / administrators
- Enforcement officials (e.g. field inspectors)
- Mass media / extension workers

• Development of administrative systems for handling applications for import and/or release of LMOs

Extent of implementation

- Partially addressed

Preferred means

- Funding support

Major target groups

- Government regulators /

	<ul style="list-style-type: none"> • Exchange programmes, internships, study tours, etc. • Technical assistance and advice 	<ul style="list-style-type: none"> • administrators • Technical personnel / Scientists • Enforcement officials (e.g. field inspectors)
<ul style="list-style-type: none"> • Mechanisms for inter-institutional communication 		
<i>Extent of implementation</i>	<i>Preferred means</i>	<i>Major target groups</i>
<ul style="list-style-type: none"> • Partially addressed 	<ul style="list-style-type: none"> • Education and training • Conferences and other fora • Technical assistance and advice 	<ul style="list-style-type: none"> • Government regulators / administrators • Enforcement officials (e.g. field inspectors) • Interest groups (consumer groups, farmers, NGOs, etc.)
<ul style="list-style-type: none"> • Mechanism for coordination among national regulatory authorities and processes 		
<i>Extent of implementation</i>	<i>Preferred means</i>	<i>Major target groups</i>
<ul style="list-style-type: none"> • Partially addressed 	<ul style="list-style-type: none"> • Education and training • Funding support • Technical assistance and advice 	<ul style="list-style-type: none"> • Government regulators / administrators • Enforcement officials (e.g. field inspectors) • Customs officials
<ul style="list-style-type: none"> • System for management of records related to LMO import applications and decisions 		
<i>Extent of implementation</i>	<i>Preferred means</i>	<i>Major target groups</i>
<ul style="list-style-type: none"> • Partially addressed 	<ul style="list-style-type: none"> • Education and training • Technical assistance and advice • Infrastructure support 	<ul style="list-style-type: none"> • IT, BCH and data / information managers • Enforcement officials (e.g. field inspectors)
<ul style="list-style-type: none"> • System for decision-making on LMOs (procedures and guidelines) 		
<i>Extent of implementation</i>	<i>Preferred means</i>	<i>Major target groups</i>
<ul style="list-style-type: none"> • Adequately addressed 	<ul style="list-style-type: none"> • Education and training • Exchange programmes, internships, study tours, etc. • Technical assistance and advice 	<ul style="list-style-type: none"> • IT, BCH and data / information managers • Technical personnel / Scientists • Enforcement officials (e.g. field inspectors)
<ul style="list-style-type: none"> • Access to information communication technologies (ICTs) 		
<i>Extent of implementation</i>	<i>Preferred means</i>	<i>Major target groups</i>
<ul style="list-style-type: none"> • Partially addressed 	<ul style="list-style-type: none"> • Education and training • Technical assistance and advice • Infrastructure support 	<ul style="list-style-type: none"> • IT, BCH and data / information managers • Technical personnel / Scientists • Enforcement officials (e.g. field inspectors)
<ul style="list-style-type: none"> • Biosafety research facilities (e.g. greenhouses) 		
<i>Extent of implementation</i>	<i>Preferred means</i>	<i>Major target groups</i>
<ul style="list-style-type: none"> • Minimally addressed 	<ul style="list-style-type: none"> • Education and training • Funding support • Technical assistance and advice 	<ul style="list-style-type: none"> • Technicians (e.g. in the laboratories) • Technical personnel / Scientists • Enforcement officials (e.g. field inspectors)
<ul style="list-style-type: none"> • Internet connectivity 		
<i>Extent of implementation</i>	<i>Preferred means</i>	<i>Major target groups</i>
<ul style="list-style-type: none"> • Partially addressed 	<ul style="list-style-type: none"> • Funding support • Infrastructure support 	<ul style="list-style-type: none"> • IT, BCH and data / information managers
<ul style="list-style-type: none"> • Office facilities, equipment and supplies for biosafety work 		
<i>Extent of implementation</i>	<i>Preferred means</i>	<i>Major target groups</i>
<ul style="list-style-type: none"> • Partially addressed 	<ul style="list-style-type: none"> • Education and training • Funding support • Technical assistance and advice 	<ul style="list-style-type: none"> • IT, BCH and data / information managers • Technical personnel / Scientists • Enforcement officials (e.g. field inspectors)

- **Telecommunication facilities (e.g. telephone, fax, e-mail)**

Extent of implementation

- Adequately addressed

Preferred means

- Funding support
- Technical assistance and advice

Major target groups

- IT, BCH and data / information managers

- **Access to information on available funding sources**

Extent of implementation

- Adequately addressed

Preferred means

- Funding support
- Guidance / training materials
- Technical assistance and advice

Major target groups

- Technicians (e.g. in the laboratories)
- Technical personnel / Scientists
- Enforcement officials (e.g. field inspectors)

- **Budgeting and financial management skills**

Extent of implementation

- Adequately addressed

Preferred means

- Education and training
- Exchange programmes, internships, study tours, etc.
- Technical assistance and advice

Major target groups

- IT, BCH and data / information managers
- Technical personnel / Scientists

- **Resource mobilisation skills (including project proposal writing)**

Extent of implementation

- Partially addressed

Preferred means

- Education and training
- Funding support
- Technical assistance and advice

Major target groups

- Technical personnel / Scientists
- Enforcement officials (e.g. field inspectors)

- **System for resource-recovery (e.g. system for collecting fees on applications)**

Extent of implementation

- Partially addressed

Preferred means

- Education and training
- Technical assistance and advice
- Infrastructure support

Major target groups

- Government regulators / administrators
- Enforcement officials (e.g. field inspectors)
- Customs officials

- **System for tracking and dealing with unintentional or illegal transboundary movements**

Extent of implementation

- Partially addressed

Preferred means

- Education and training
- Funding support
- Technical assistance and advice

Major target groups

- Government regulators / administrators
- Enforcement officials (e.g. field inspectors)
- Customs officials

- **Mechanism for inspections and enforcement of biosafety laws**

Extent of implementation

- Adequately addressed

Preferred means

- Education and training
- Funding support
- Technical assistance and advice

Major target groups

- Technical personnel / Scientists
- Enforcement officials (e.g. field inspectors)
- Mass media / extension workers

- **System for post-release monitoring of LMOs**

Extent of implementation

- Not addressed

Preferred means

- Education and training
- Funding support
- Technical assistance and advice

Major target groups

- Technical personnel / Scientists
- Enforcement officials (e.g. field inspectors)
- Mass media / extension workers

- **Access to information on existing academic training programmes in biosafety**

Extent of implementation

- Partially addressed

Preferred means

- Education and training
- Membership with professional bodies / networks
- Technical assistance and advice

Major target groups

- Government regulators / administrators
- Technical personnel / Scientists
- Enforcement officials (e.g. field inspectors)

- **Access to biosafety training materials**

Extent of implementation

Preferred means

Major target groups

- Partially addressed

- Education and training
- Funding support
- Guidance / training materials

- Government regulators / administrators
- Enforcement officials (e.g. field inspectors)
- Mass media / extension workers

• Access to information on staff exchange/on-the-job-training opportunities

Extent of implementation

- Minimally addressed

Preferred means

- Education and training
- Funding support
- Conferences and other fora

Major target groups

- Government regulators / administrators
- Technical personnel / Scientists
- Enforcement officials (e.g. field inspectors)

• Training in biosafety legislation and policy development and practice

Extent of implementation

- Partially addressed

Preferred means

- Education and training
- Funding support
- Technical assistance and advice

Major target groups

- Decision / policy-makers (e.g. Ministers)
- Government regulators / administrators
- Technical personnel / Scientists

• Training in scientific and technical fields relevant to biosafety

Extent of implementation

- Partially addressed

Preferred means

- Funding support
- Scholarships / fellowships
- Technical assistance and advice

Major target groups

- Technical personnel / Scientists
- Graduate and undergraduate students
- Enforcement officials (e.g. field inspectors)

• Training in legal, social and economic fields relevant to biosafety

Extent of implementation

- Minimally addressed

Preferred means

- Education and training
- Funding support
- Scholarships / fellowships

Major target groups

- Government regulators / administrators
- Technical personnel / Scientists
- Other professionals (e.g. lawyers, economists, etc.)

• Training in basics of biosafety and modern biotechnology

Extent of implementation

- Partially addressed

Preferred means

- Education and training
- Funding support
- Exchange programmes, internships, study tours, etc.

Major target groups

- Government regulators / administrators
- Enforcement officials (e.g. field inspectors)
- Interest groups (consumer groups, farmers, NGOs, etc.)

• Training in risk assessment

Extent of implementation

- Partially addressed

Preferred means

- Education and training
- Funding support
- Exchange programmes, internships, study tours, etc.

Major target groups

- Technical personnel / Scientists
- Graduate and undergraduate students
- Enforcement officials (e.g. field inspectors)

• Training in risk management

Extent of implementation

- Partially addressed

Preferred means

- Education and training
- Funding support
- Technical assistance and advice

Major target groups

- Government regulators / administrators
- Technical personnel / Scientists
- Enforcement officials (e.g. field inspectors)

• Training in biosafety regulatory issues

Extent of implementation

- Partially addressed

Preferred means

- Education and training

Major target groups

- Technical personnel / Scientists

	<ul style="list-style-type: none"> • Funding support • Exchange programmes, internships, study tours, etc. 	<ul style="list-style-type: none"> • Enforcement officials (e.g. field inspectors) • Clearing agents, importers, exporters and local producers
<ul style="list-style-type: none"> • Training in biosafety communication 		
<i>Extent of implementation</i>	<i>Preferred means</i>	<i>Major target groups</i>
<ul style="list-style-type: none"> • Minimally addressed 	<ul style="list-style-type: none"> • Education and training • Funding support • Technical assistance and advice 	<ul style="list-style-type: none"> • Government regulators / administrators • Technical personnel / Scientists • Mass media / extension workers
<ul style="list-style-type: none"> • Training in LMO sampling and detection 		
<i>Extent of implementation</i>	<i>Preferred means</i>	<i>Major target groups</i>
<ul style="list-style-type: none"> • Partially addressed 	<ul style="list-style-type: none"> • Education and training • Funding support • Technical assistance and advice 	<ul style="list-style-type: none"> • Technicians (e.g. in the laboratories) • Technical personnel / Scientists • Enforcement officials (e.g. field inspectors)
<ul style="list-style-type: none"> • Training in post-release monitoring of LMOs 		
<i>Extent of implementation</i>	<i>Preferred means</i>	<i>Major target groups</i>
<ul style="list-style-type: none"> • Not addressed 	<ul style="list-style-type: none"> • Education and training • Funding support • Technical assistance and advice 	<ul style="list-style-type: none"> • Government regulators / administrators • Technical personnel / Scientists • Enforcement officials (e.g. field inspectors)
<ul style="list-style-type: none"> • Biosafety research 		
<i>Extent of implementation</i>	<i>Preferred means</i>	<i>Major target groups</i>
<ul style="list-style-type: none"> • Partially addressed 	<ul style="list-style-type: none"> • Education and training • Funding support • Scholarships / fellowships 	<ul style="list-style-type: none"> • Government regulators / administrators • Technical personnel / Scientists • Graduate and undergraduate students
<ul style="list-style-type: none"> • Training in administrative practices for handling LMO import and release applications 		
<i>Extent of implementation</i>	<i>Preferred means</i>	<i>Major target groups</i>
<ul style="list-style-type: none"> • Adequately addressed 	<ul style="list-style-type: none"> • Education and training • Funding support • Technical assistance and advice 	<ul style="list-style-type: none"> • Government regulators / administrators • Enforcement officials (e.g. field inspectors) • Customs officials
<ul style="list-style-type: none"> • Training in preparation and presentation of LMO export or release applications/dossiers 		
<i>Extent of implementation</i>	<i>Preferred means</i>	<i>Major target groups</i>
<ul style="list-style-type: none"> • Partially addressed 	<ul style="list-style-type: none"> • Education and training • Funding support • Technical assistance and advice 	<ul style="list-style-type: none"> • Technical personnel / Scientists • Interest groups (consumer groups, farmers, NGOs, etc.)
<ul style="list-style-type: none"> • Training in socio-economic considerations relating to LMOs 		
<i>Extent of implementation</i>	<i>Preferred means</i>	<i>Major target groups</i>
<ul style="list-style-type: none"> • Minimally addressed 	<ul style="list-style-type: none"> • Education and training • Funding support • Technical assistance and advice 	<ul style="list-style-type: none"> • Government regulators / administrators • Technical personnel / Scientists • Interest groups (consumer groups, farmers, NGOs, etc.)
<ul style="list-style-type: none"> • Training in cost/benefit analysis as part of the risk management strategy 		
<i>Extent of implementation</i>	<i>Preferred means</i>	<i>Major target groups</i>
<ul style="list-style-type: none"> • Minimally addressed 	<ul style="list-style-type: none"> • Education and training • Funding support • Technical assistance and advice 	<ul style="list-style-type: none"> • Government regulators / administrators • Technical personnel / Scientists • Other professionals (e.g. lawyers, economists, etc.)
<ul style="list-style-type: none"> • Training in documentation and identification requirements for LMO shipments 		

Extent of implementation

- Partially addressed

Preferred means

- Education and training
- Funding support
- Technical assistance and advice

Major target groups

- Government regulators / administrators
- Technical personnel / Scientists
- Interest groups (consumer groups, farmers, NGOs, etc.)

- **Training in compliance requirements under the Protocol**

Extent of implementation

- Partially addressed

Preferred means

- Education and training
- Funding support
- Conferences and other fora

Major target groups

- Government regulators / administrators
- Technical personnel / Scientists
- Enforcement officials (e.g. field inspectors)

- **Training in liability and redress issues under the Protocol**

Extent of implementation

- Minimally addressed

Preferred means

- Education and training
- Funding support
- Technical assistance and advice

Major target groups

- Government regulators / administrators
- Technical personnel / Scientists
- Interest groups (consumer groups, farmers, NGOs, etc.)

- **Guidance on other international agreements relevant to biosafety**

Extent of implementation

- Partially addressed

Preferred means

- Education and training
- Funding support
- Technical assistance and advice

Major target groups

- Government regulators / administrators
- Technical personnel / Scientists
- Enforcement officials (e.g. field inspectors)

- **Access to basic ecological data to support risk assessments**

Extent of implementation

- Minimally addressed

Preferred means

- Education and training
- Funding support
- Technical assistance and advice

Major target groups

- Government regulators / administrators
- Technical personnel / Scientists
- Enforcement officials (e.g. field inspectors)

- **Guidance documents on specific aspects of risk assessment**

Extent of implementation

- Partially addressed

Preferred means

- Education and training
- Funding support
- Technical assistance and advice

Major target groups

- Government regulators / administrators
- Technical personnel / Scientists
- Enforcement officials (e.g. field inspectors)

- **Guidance on how to perform risk assessment**

Extent of implementation

- Partially addressed

Preferred means

- Education and training
- Funding support
- Exchange programmes, internships, study tours, etc.

Major target groups

- Government regulators / administrators
- Technical personnel / Scientists
- Graduate and undergraduate students

- **National risk management system/strategy**

Extent of implementation

- Minimally addressed

Preferred means

- Education and training
- Funding support
- Technical assistance and advice

Major target groups

- Government regulators / administrators
- Technical personnel / Scientists
- Enforcement officials (e.g. field inspectors)

- **System to detect and appropriately respond to unintentional LMO releases**

*Extent of implementation**Preferred means**Major target groups*

- Partially addressed

- Education and training
- Funding support
- Technical assistance and advice

- Government regulators / administrators
- Technical personnel / Scientists
- Enforcement officials (e.g. field inspectors)

• **Guidance on different risk management measures**

Extent of implementation

- Partially addressed

Preferred means

- Education and training
- Funding support
- Technical assistance and advice

Major target groups

- Government regulators / administrators
- Technical personnel / Scientists
- Enforcement officials (e.g. field inspectors)

• **Mechanisms for cooperation in risk management**

Extent of implementation

- Minimally addressed

Preferred means

- Funding support
- Guidance / training materials
- Technical assistance and advice

Major target groups

- Government regulators / administrators
- Technical personnel / Scientists
- Enforcement officials (e.g. field inspectors)

• **National framework/system for post-release monitoring of LMOs**

Extent of implementation

- Minimally addressed

Preferred means

- Guidance / training materials
- Technical assistance and advice

Major target groups

- Government regulators / administrators
- Technical personnel / Scientists
- Enforcement officials (e.g. field inspectors)

• **Tools and methodologies for environmental monitoring of LMOs**

Extent of implementation

- Minimally addressed

Preferred means

- Exchange programmes, internships, study tours, etc.
- Guidance / training materials
- Technical assistance and advice

Major target groups

- Government regulators / administrators
- Technicians (e.g. in the laboratories)
- Enforcement officials (e.g. field inspectors)

• **Biosafety awareness materials**

Extent of implementation

- Partially addressed

Preferred means

- Education and training
- Guidance / training materials
- Conferences and other fora

Major target groups

- Decision / policy-makers (e.g. Ministers)
- IT, BCH and data / information managers
- Interest groups (consumer groups, farmers, NGOs, etc.)

• **Biosafety awareness and education programmes**

Extent of implementation

- Minimally addressed

Preferred means

- Funding support
- Exchange programmes, internships, study tours, etc.
- Technical assistance and advice

Major target groups

- Decision / policy-makers (e.g. Ministers)
- Government regulators / administrators
- General public

• **Biosafety documentation units or reference libraries**

Extent of implementation

- Partially addressed

Preferred means

- Funding support
- Guidance / training materials
- Technical assistance and advice

Major target groups

- IT, BCH and data / information managers
- Technical personnel / Scientists
- Academia

• **Facilities for public access to biosafety information and means of access to the Biosafety Clearing-House**

Extent of implementation

Preferred means

Major target groups

<ul style="list-style-type: none"> Minimally addressed 	<ul style="list-style-type: none"> Education and training Funding support Technical assistance and advice 	<ul style="list-style-type: none"> Government regulators / administrators Technical personnel / Scientists General public
<ul style="list-style-type: none"> National biosafety website 		
<i>Extent of implementation</i>	<i>Preferred means</i>	<i>Major target groups</i>
<ul style="list-style-type: none"> Adequately addressed 	<ul style="list-style-type: none"> Technical assistance and advice 	<ul style="list-style-type: none"> IT, BCH and data / information managers Government regulators / administrators Technical personnel / Scientists
<ul style="list-style-type: none"> Biosafety outreach strategy/ communication plan 		
<i>Extent of implementation</i>	<i>Preferred means</i>	<i>Major target groups</i>
<ul style="list-style-type: none"> Partially addressed 	<ul style="list-style-type: none"> Education and training Technical assistance and advice 	<ul style="list-style-type: none"> Decision / policy-makers (e.g. Ministers) IT, BCH and data / information managers Mass media / extension workers
<ul style="list-style-type: none"> Training in risk-communication 		
<i>Extent of implementation</i>	<i>Preferred means</i>	<i>Major target groups</i>
<ul style="list-style-type: none"> Partially addressed 	<ul style="list-style-type: none"> Education and training Funding support Technical assistance and advice 	<ul style="list-style-type: none"> Government regulators / administrators Technical personnel / Scientists Mass media / extension workers
<ul style="list-style-type: none"> Systems for public participation in biosafety 		
<i>Extent of implementation</i>	<i>Preferred means</i>	<i>Major target groups</i>
<ul style="list-style-type: none"> Minimally addressed 	<ul style="list-style-type: none"> Education and training Funding support Technical assistance and advice 	<ul style="list-style-type: none"> Government regulators / administrators Mass media / extension workers General public
<ul style="list-style-type: none"> National system (policy, procedures and mechanisms) for biosafety information management 		
<i>Extent of implementation</i>	<i>Preferred means</i>	<i>Major target groups</i>
<ul style="list-style-type: none"> Partially addressed 	<ul style="list-style-type: none"> Education and training Funding support Technical assistance and advice 	<ul style="list-style-type: none"> Decision / policy-makers (e.g. Ministers) IT, BCH and data / information managers Government regulators / administrators
<ul style="list-style-type: none"> Equipment (hardware and software) to facilitate national participation in the BCH 		
<i>Extent of implementation</i>	<i>Preferred means</i>	<i>Major target groups</i>
<ul style="list-style-type: none"> Partially addressed 	<ul style="list-style-type: none"> Funding support Exchange programmes, internships, study tours, etc. Technical assistance and advice 	<ul style="list-style-type: none"> Decision / policy-makers (e.g. Ministers) IT, BCH and data / information managers Government regulators / administrators
<ul style="list-style-type: none"> Establishment of national biosafety databases 		
<i>Extent of implementation</i>	<i>Preferred means</i>	<i>Major target groups</i>
<ul style="list-style-type: none"> Partially addressed 	<ul style="list-style-type: none"> Education and training Funding support Technical assistance and advice 	<ul style="list-style-type: none"> IT, BCH and data / information managers Government regulators / administrators Technical personnel / Scientists
<ul style="list-style-type: none"> Interoperability with the BCH central portal 		
<i>Extent of implementation</i>	<i>Preferred means</i>	<i>Major target groups</i>
<ul style="list-style-type: none"> Partially addressed 	<ul style="list-style-type: none"> Technical assistance and advice 	<ul style="list-style-type: none"> IT, BCH and data / information

- **Non-Internet access to the BCH**

Extent of implementation

- Partially addressed

Preferred means

- Education and training
- Funding support
- Technical assistance and advice

managers

- Government regulators / administrators
- Technical personnel / Scientists

Major target groups

- IT, BCH and data / information managers
- Government regulators / administrators
- Technical personnel / Scientists

- **Systems for data and information security and back-up**

Extent of implementation

- Partially addressed

Preferred means

- Education and training
- Funding support
- Exchange programmes, internships, study tours, etc.

Major target groups

- IT, BCH and data / information managers
- Government regulators / administrators
- Enforcement officials (e.g. field inspectors)

- **Systems for data validation and quality control**

Extent of implementation

- Partially addressed

Preferred means

- Funding support
- Guidance / training materials
- Technical assistance and advice

Major target groups

- IT, BCH and data / information managers
- Government regulators / administrators
- Technical personnel / Scientists

- **Mechanism for biosafety information gathering and reporting**

Extent of implementation

- Minimally addressed

Preferred means

- Education and training
- Funding support
- Technical assistance and advice

Major target groups

- Government regulators / administrators
- Technical personnel / Scientists
- Enforcement officials (e.g. field inspectors)

- **Training in the use and management of the BCH central portal**

Extent of implementation

- Partially addressed

Preferred means

- Funding support
- Guidance / training materials
- Conferences and other fora

Major target groups

- IT, BCH and data / information managers
- Government regulators / administrators
- Technical personnel / Scientists

- **Mechanisms for regional cooperation**

Extent of implementation

- Partially addressed

Preferred means

- Technical assistance and advice

Major target groups

- Government regulators / administrators
- Technical personnel / Scientists
- Enforcement officials (e.g. field inspectors)

- **Training in collaboration techniques and approaches**

Extent of implementation

- Minimally addressed

Preferred means

- Education and training
- Funding support
- Technical assistance and advice

Major target groups

- Government regulators / administrators
- Technical personnel / Scientists
- Enforcement officials (e.g. field inspectors)

- **Training in negotiation skills**

Extent of implementation

Preferred means

Major target groups

- Partially addressed

- Education and training
- Conferences and other fora
- Technical assistance and advice

- Decision / policy-makers (e.g. Ministers)
- Government regulators / administrators
- Technical personnel / Scientists

• Access to information on available technologies relevant for biosafety

Extent of implementation

- Minimally addressed

Preferred means

- Education and training
- Conferences and other fora
- Technical assistance and advice

Major target groups

- Government regulators / administrators
- Interest groups (consumer groups, farmers, NGOs, etc.)
- Mass media / extension workers

• Enabling policy/regulatory framework for technology transfer

Extent of implementation

- Partially addressed

Preferred means

- Education and training
- Membership with professional bodies / networks
- Technical assistance and advice

Major target groups

- Decision / policy-makers (e.g. Ministers)
- Government regulators / administrators
- Technical personnel / Scientists

• Establishment of technology information platforms

Extent of implementation

- Partially addressed

Preferred means

- Education and training
- Exchange programmes, internships, study tours, etc.
- Technical assistance and advice

Major target groups

- IT, BCH and data / information managers
- Government regulators / administrators
- Technical personnel / Scientists

• National framework and action plan for technology transfer

Extent of implementation

- Partially addressed

Preferred means

- Education and training
- Funding support
- Technical assistance and advice

Major target groups

- Decision / policy-makers (e.g. Ministers)
- Government regulators / administrators
- Technical personnel / Scientists

• Public-private partnerships for technology development

Extent of implementation

- Partially addressed

Preferred means

- Education and training
- Funding support
- Technical assistance and advice

Major target groups

- Government regulators / administrators
- Interest groups (consumer groups, farmers, NGOs, etc.)
- Other professionals (e.g. lawyers, economists, etc.)

• Laboratory for LMO detection and analysis

Extent of implementation

- Partially addressed

Preferred means

- Funding support
- Technical assistance and advice
- Equipment

Major target groups

- Government regulators / administrators
- Technicians (e.g. in the laboratories)
- Technical personnel / Scientists

• Guidance on unique identification systems

Extent of implementation

- Minimally addressed

Preferred means

- Education and training
- Exchange programmes, internships, study tours, etc.
- Technical assistance and advice

Major target groups

- Government regulators / administrators
- Technical personnel / Scientists
- Enforcement officials (e.g. field inspectors)

• Simple/quick LMO test kits

Extent of implementation

Preferred means

Major target groups

- Partially addressed

- Funding support
- Exchange programmes, internships, study tours, etc.

- Government regulators / administrators
- Technicians (e.g. in the laboratories)
- Enforcement officials (e.g. field inspectors)

• **National system for taking into account socio-economic considerations in decision-making regarding LMOs**

Extent of implementation

- Partially addressed

Preferred means

- Funding support
- Technical assistance and advice

Major target groups

- Decision / policy-makers (e.g. Ministers)
- Government regulators / administrators
- Interest groups (consumer groups, farmers, NGOs, etc.)

• **Guidance on taking into account socio-economic considerations in decision-making concerning LMOs**

Extent of implementation

- Partially addressed

Preferred means

- Funding support
- Guidance / training materials
- Technical assistance and advice

Major target groups

- Decision / policy-makers (e.g. Ministers)
- Government regulators / administrators
- Technical personnel / Scientists

• **Mechanisms for cooperation on research on socio-economic impacts of LMOs**

Extent of implementation

- Partially addressed

Preferred means

- Funding support
- Exchange programmes, internships, study tours, etc.
- Technical assistance and advice

Major target groups

- Government regulators / administrators
- Technical personnel / Scientists

• **Development of LMO traceability systems**

Extent of implementation

- Partially addressed

Preferred means

- Funding support
- Exchange programmes, internships, study tours, etc.
- Technical assistance and advice

Major target groups

- Government regulators / administrators
- Technical personnel / Scientists
- Enforcement officials (e.g. field inspectors)

• **Establishment of identity preservation systems**

Extent of implementation

- Minimally addressed

Preferred means

- Education and training
- Funding support
- Technical assistance and advice

Major target groups

- Government regulators / administrators
- Technical personnel / Scientists
- Enforcement officials (e.g. field inspectors)

• **National system for inspection and verification of documentation accompanying LMO shipments**

Extent of implementation

- Partially addressed

Preferred means

- Funding support
- Exchange programmes, internships, study tours, etc.
- Scholarships / fellowships

Major target groups

- Government regulators / administrators
- Technical personnel / Scientists
- Enforcement officials (e.g. field inspectors)

• **National system for managing and protecting confidential information**

Extent of implementation

- Partially addressed

Preferred means

- Education and training
- Funding support
- Technical assistance and advice

Major target groups

- IT, BCH and data / information managers
- Government regulators / administrators
- Technical personnel / Scientists

• **Training in biosafety record keeping and information security**

Extent of implementation

Preferred means

Major target groups

