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**SOUTH-SOUTH AND NORTH-SOUTH COOPERATION IN BIOSAFETY  
EDUCATION AND TRAINING: A REVIEW OF EXISTING COLLABORATIVE  
INITIATIVES AND NETWORKS**

*Note by the Executive Secretary*

**I. INTRODUCTION**

1. Article 22 of the Cartagena Protocol on Biosafety requires Parties to cooperate in the development and/or strengthening of human resources and institutional capacities in biosafety, including biotechnology to the extent that it is required for biosafety, for the purpose of the effective implementation of the Protocol, in developing country Parties and in Parties with economies in transition. Article 22 further states that such cooperation shall, subject to the different situations, capabilities and requirements of each Party, include scientific and technical training and the enhancement of technological and institutional capacities in biosafety.

2. In its decision BS-II/3, paragraph 11, the Conference of the Parties serving as the meeting of the Parties to the Cartagena Protocol on Biosafety (COP-MOP) invited institutions offering biosafety training and education programmes to “establish collaborative partnerships with other institutions, especially those in developing countries, with a view to transferring skills, sharing experience and course materials as well as fostering harmonization and mutual recognition of the course offerings”.

3. At its third meeting, which was held in Curitiba, Brazil from 13 to 17 March 2006, the Conference of the Parties serving as the meeting of the Parties to the Protocol further emphasized the need to promote long-term education and training in biosafety in order to develop core expertise at the national level, especially in developing country Parties and Parties with economies in transition (decision BS-III/3, para. 11). In paragraphs 16 and 17 of decision BS-III/11, the Parties to the Protocol specifically encouraged Parties and other Governments to invite universities and colleges to develop and/or expand degree-granting programmes that focus on training biosafety professionals. It also encouraged the development, as appropriate, of exchange and scholarship programmes for biosafety.

4. The present document reviews existing collaborative initiatives and networks between academic institutions and organizations involved in biosafety education and training and other relevant initiatives. It describes the scope, experiences and the lessons learned from those initiatives. The review is intended to facilitate and inform the discussion on possible strategies and mechanisms for promoting collaboration in biosafety education and training among developing country institutions (South-South cooperation) and between developing and developed country universities, training institutions and centres of excellence (North-South cooperation).

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## II. EXAMPLES OF COLLABORATIVE INITIATIVES IN BIOSAFETY EDUCATION AND TRAINING

### A. *Initiatives of direct relevance to biosafety*

5. Collaboration between individual universities and among groups of universities has increased over the past few years. In the area of biosafety, a few collaborative initiatives and partnership arrangements have been established, mostly as part of specific projects and programmes. Examples of such initiatives and partnership arrangements are described below.

#### ***United Nations Industrial Development Organization (UNIDO)-sponsored capacity-building network for biosafety training***

6. In 2006 the United Nations Industrial Development Organization (UNIDO) established a global biosafety training network with emphasis on South-South cooperation aimed at strengthening national capacities to address biosafety issues. The aim of the network is to provide internationally accredited training in biosafety to policy makers, researchers and professionals in government agencies or industry. The network involves currently consists of four universities and one regional centre of excellence which are offering academically-accredited training courses in biosafety at the post-graduate level. <sup>1/</sup>

7. The courses, offered over a 12-month period through a combination of distance-learning and on-campus training sessions, lead to an award of a postgraduate diploma or a Masters degree. They cover a wide range of topics including the risk assessment and risk management of biotechnology-derived products as well as the policy, legal, regulatory and ethical aspects of biotechnology. The course materials are developed with support from UNIDO and the course modules are delivered by a team of experienced and highly-qualified faculty. Overall, the course is supervised by an International Advisory Board that ensures high standard training materials and a course content that responds to the needs of the countries within each region.

8. The participating institutions collaborate with each other through, *inter alia*, exchange of faculty, sharing of information and experience in the development of the course curriculum, sharing of resource materials and other means.

#### ***Eastern African Regional Programme and Research Network for Biotechnology, Biosafety and Biotechnology Policy Development (BIO-EARN) <sup>2/</sup>***

9. BIO-EARN is a regional programme initiated in 1998, with support from the Swedish Government, to develop the human resources and the infrastructure at universities and research institutions in four Eastern Africa countries (Ethiopia, Kenya, Uganda and Tanzania) in the areas of biotechnology, biosafety and biotechnology policy development. BIO-EARN, *inter alia*, supported collaborative training partnerships between Eastern African institutions and relevant Swedish institutions, including Lund University, the Swedish University of Agricultural Sciences and the Royal Institute of Technology. The collaboration involves masters and doctoral training and research in ecological impact assessment of transgenic crops and in biotechnology. A number of students from Eastern Africa spent part of their study at the Swedish Universities and were supervised by faculty from both Swedish and Eastern African institutions. The programme has so far trained six MSc and 20 PhD students.

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<sup>1/</sup> The current members of the network are: University of Concepción (Chile), the Pontifical Catholic University of Minas Gerais, PUC Minas (Brazil), University of Malaya (Malaysia), Ghent University (Belgium), Ancona Marche Polytechnic University (Italy) and the NEPAD-Biosciences Eastern and Central Africa, BecA (Nairobi, Kenya), see: [http://binas.unido.org/wiki/index.php?title=Main\\_Page](http://binas.unido.org/wiki/index.php?title=Main_Page)

<sup>2/</sup> Further information about the BIO-EARN is available at: <http://www.bio-earn.org>

10. Relevant experiences and lessons learned from this programme include the following: <sup>3/</sup>

(a) The model chosen for PhD training – the “sandwich” programmes whereby students did their course work and research at the Swedish universities and in their home universities, with supervisors on both sides – was a major contributing factor that led to the success of doctoral training component. It enabled the students to benefit from the cutting edge research environment in Sweden while still maintaining links with the programmes in their home countries. However, according to the evaluation report of the programme, some of the students reported that the “sandwich” model imposed a big burden on their families, and suggested that such arrangements need to provide for family visits.

(b) The exchange visits between the Swedish supervisors to visit their African counterparts contributed to a good understanding of the situation in the partner institutions and to the identification of opportunities for increased networking;

(c) Furthermore, the student exchange programme under which Swedish students spent some time at the African partner institutions was very useful in fostering mutual interaction and learning;

(d) One of shortcomings of the programme was the inadequate assessment of the level of expertise of the co-supervisors on the proposed doctoral research projects. This is important in order to ensure balanced and effective supervision of the students during time they spend at their home institution.

***BiosafeTrain –Capacity Building for Biosafety and Ecological Impact Assessment of Transgenic Plants in East Africa***

11. Biosafetrain is a collaborative initiative between the Danish Royal Veterinary and Agricultural University and the following four East African institutions: Makerere University, University of Dar es Salaam, University of Nairobi and the Kenya Agricultural Research Institute. It was launched in December 2004 and involves masters- and doctoral-level training in agricultural and environmental impacts of genetically modified (GM) plants. Some of the collaborative activities of the initiative include: (i) joint supervision of students at the local universities and research institutes by both Danish and local professors and experts, (ii) upgrading of existing biotechnology and biosafety research infrastructure/facilities; and (iii) undertaking of research on biosafety of GM crops, including the testing and revision of suggested standard procedures for GM plant biosafety. <sup>4/</sup>

***The Swiss Biosafety Interdisciplinary Network (RIBios) Collaborative with West African Institutions <sup>5/</sup>***

12. RIBios, with funding from the Swiss Federal Department for Development and Cooperation (SDC), has since 2005 implemented a two-year collaborative initiative with institutions in West Africa to address the biosafety training needs of Francophone countries. The collaboration involves training and other human resource development activities in Francophone Africa and Switzerland. This includes a 3-month interdisciplinary biosafety training course offered at the University of Bamako in Mali. RIBios is working with a network of teaching partners in preparing the course content and in providing assistance and advice. In addition to biotechnology and biosafety, the course covers the following topics: the ethical and cultural implications of biotechnology, the economic impacts of biotechnology and relevant international and national legal frameworks. The course is taught in French through a combination of instruction at Bamako University and independent study by the students.

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<sup>3/</sup> For further information see the Evaluation Report of the BIO-EARN Programme (Sida Evaluation 04/09) available at: <http://www.asdi.org/sida/jsp/sida.jsp?d=118&a=3168>

<sup>4/</sup> Details about BioSafeTrain can be accessed at: <http://www.biosafetrain.dk/Home/About.htm>.

<sup>5/</sup> Further information about the RIBios initiative is available at: <http://www.ribios.ch/en/formation/index.html>

***The Genøk International and Regional Holistic Biosafety Courses and the Gateways Institutes Initiative 6/***

13. Since 2003 the Norwegian Institute of Gene Ecology (Genøk) has, in collaboration with the UNEP, the New Zealand Institute of Gene Ecology (NZIGE), the Third World Network (TWN) and the University of Tromsø offered an annual international course entitled “Holistic Foundations for Assessment and Regulation of Genetic Engineering and Genetically Modified Organisms”. It is a two-week residential course and is equivalent to 12 credits under the ECTS (European Credit Transfer System). Genøk also organised one regional biosafety course at the Agricultural University of Bogor in Indonesia which was attended by 50 participants and another for the South American region which took place at the Agricultural University of Lima in Peru. Genøk is also currently developing an MSc and PhD programmes in biosafety in collaboration with the University of Tromsø, the United Nations University (UNU) and the Global Virtual University (GVU).

14. Furthermore, Genøk and NZIGE are currently in the process of establishing a network of regional centres for research and training in biosafety in developing countries known as the “Gateways Institutes of Gene Ecology”. 7/ This initiative seeks to contribute to training and research cooperation with institutions in the South in gene ecology. Its goal is to develop the regional institutes into facilities that would serve to build global capacity in biosafety by: (i) supporting ongoing research on biosafety and the transfer of knowledge and skills; (ii) providing career pathways for dedicated national biosafety experts; and (iii) converting research and training in biosafety into enlightened regulation and policy throughout the world. Genøk and NZIGE will serve as mentoring and training foci for the regional institutes and as ongoing partners in the network. To date, memoranda of understanding have been signed with the National Institute for Scientific and Industrial Research (NISIR) of Zambia and the Nanjing Institute of Environmental Sciences (NIES/SEPA) of China. Consultations are underway with the Ethiopian Environmental Protection Agency (EPA) and Mekelle University in Ethiopia. This initiative will involve exchange of staff and students among the participating institutions.

***BIONET-Africa Initiative***

15. In 2001 the International Centre of Insect Physiology and Ecology (ICIPE) (now known as “African Insect Science for Food and Health) established a Network for Capacity Building in Biotechnology and Biosafety for African Universities. This was done in order to enhance and consolidate the capacities of national universities in Africa to undertake biotechnology/ biosafety-related collaborative research and teaching and to build a critical mass of university researchers to tackle the key problems facing the region. A number of Master of Science (MSc) internships and fellowships were awarded. The research internship programme and the Scientist Exchange Visit Programme (including University faculty visits to network training centres) provided an opportunity for the development of collaborative projects between network partners. The annual training course in biotechnology and biosafety (ATAC) also provided a unique opportunity for lecturers and other scientists to exchange experiences among themselves and with developed country partners. 8/

***B. Other relevant initiatives and networks***

16. There are a number of other non-biosafety collaborative initiatives and networks which may provide useful experiences and lessons. Examples include: (i) the University of the Arctic Network, (ii)

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6/ See details at: <http://www.genok.org/english/>

7/ See further information in the GENOK Annual Report 2005 available at:  
[http://www.genok.org/english/lesartikkel.asp?article\\_id=1379&id2=WGhGdqNKPuC9qn5Rf9q3cR3Uy](http://www.genok.org/english/lesartikkel.asp?article_id=1379&id2=WGhGdqNKPuC9qn5Rf9q3cR3Uy)

8/ See details at: <http://bch.biodiv.org/database/record.shtml?id=271>

UNESCO's University Twinning and Networking (UNITWIN) Programme, and (iii) the UN Train-X programme.

***University of the Arctic <sup>9/</sup>***

17. The University of the Arctic (UArctic) is a cooperative network of northern universities and colleges. It aims at building post-secondary education programmes that are effective, relevant and accessible to northern students. It stimulates cooperation by promoting the sharing of resources, facilities, and expertise and maximising the unique strengths of the different network members. The core activities of the UArctic include: student and faculty exchange, joint curriculum and degree development, research, dialogue and discussion, and the development of innovative programmes.

18. Members of the UArctic offer common degree programmes in Circumpolar Studies. The University of the Arctic delivers the core courses online and registration is open to students from all UArctic members. Students can take regular courses at their home universities and also have the opportunity to pursue a particular course of study through attendance at another member university (i.e. on an exchange basis) and/or through online courses. Students benefit from the resources of another university and from those of the network. In other words, students can obtain a Circumpolar Studies degree from their home universities with the desired specialization obtained at other universities online or through an exchange programme.

19. This model would be useful in developing joint degree-granting programmes in biosafety by universities with limited resources. Different universities interested in offering biosafety degree programmes would agree on a common core curricula and allow students to take additional courses at other universities offering specialised training in particular subjects (e.g. biosafety laws and regulations or risk assessment and risk management) and transfer the credits to their "parent" university. This would allow students to pursue more comprehensive biosafety degree or diploma programmes tailored to their specific needs and professional aspirations.

***The UNESCO University Education Twinning and Networking (UNITWIN) Programme <sup>10/</sup>***

20. The UNITWIN programme was launched by UNESCO in 1992 to advance research, training and programme development in higher education by building university networks and encouraging inter-university cooperation through transfer and sharing of knowledge within and across borders. The program mobilises universities and research institutions to share expertise and join forces with UNESCO to address particular issues of global or regional significance in partnership with relevant non-governmental organizations, foundations, and public and private sector organizations. Activities of the programme include training, research, program development, exchange of academics, facilitation of study abroad, organization of seminars and workshops and the development of publications.

21. A group of universities in different countries may, with support from UNESCO, decide to join forces in addressing a particular issue or set of issues (e.g. environment and sustainable development, biodiversity conservation, biosafety, etc) and establish a formal network through a memorandum of understanding (MOU). The MOU sets out the purpose of the network, its expected outputs, how it will

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<sup>9/</sup> See details at: <http://www.uarctic.org>

<sup>10/</sup> UNESCO (2007) "UNESCO Chairs – UNITWIN Networks". Online at:  
[http://portal.unesco.org/education/en/ev.php-URL\\_ID=22129&URL\\_DO=DO\\_TOPIC&URL\\_SECTION=201.html](http://portal.unesco.org/education/en/ev.php-URL_ID=22129&URL_DO=DO_TOPIC&URL_SECTION=201.html)



function and how it will be sustained. Within this network, each participating institution may establish an individual UNESCO Chair. <sup>11/</sup>

22. A project proposal to establish an inter-university network can be submitted to the Director General of UNESCO, using a standardised format, by the lead institution designated to act as the focal point and ensure the development of the network. <sup>12/</sup> The participating institutions have to provide a letter of commitment to the proposed network, signed by the head of the institution. The host institutions and/or funding organizations, with approval by the participating institutions, appoint a Coordinator of the Network. Appointments to a network coordinator may also be made on a rotating basis among the participating institutions. The criteria used in the selection of a network coordinator include the following:

- (a) Should be a renowned specialist in the domain(s) to be covered;
- (b) Should have the capacity and experience to promote cooperation at national, regional and international levels;
- (c) Should be willing and able to mobilize resources from private and public sectors.

23. UNESCO not does serve as a funding agency for the networks. It encourages the institutions to mobilize financial partners at the time when they are preparing the project proposals and also offers its services in helping to mobilize resources.

24. The UNITWIN programme has contributed to the establishment of new teaching and research programmes (and the enrichment of existing ones) and to the establishment of UNESCO Chairs and Networks dealing with different issues of regional and international importance. To date, the UNITWIN network has 603 chairs and 66 networks involving over 730 institutions in 125 countries. For example, a UNITWIN Network on Sustainable Development, established in 1992, is hosted by Laval University in Quebec City, Canada. Its partner universities are located in Argentina, Brazil, China, Côte d'Ivoire, Haiti, India, Japan Mexico and Senegal. The network aims at furthering research in the field of social management of ecological problems and of resource management. It also seeks to provide training for students in the area of the environment and sustainable development. Finally, the network encourages collaboration between teachers and researchers from both the North and the South. Individual chairs encourage interdisciplinary collaboration and the sharing of knowledge on sustainable development issues.

25. The UNITWIN programme provides a potentially useful model that could be used to establish collaborative initiatives and partnership arrangements between universities and relevant institutions involved in biosafety education and training.

### ***United Nations Train-X System***

26. Train-X is an initiative sponsored by the United Nations Development Programme (UNDP) that seeks to build sustainable capacities in different areas through global cooperation in the development and implementation of training programmes and the establishment of training networks. The training networks comprise universities and other institutions from both developed and developing countries.

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<sup>11/</sup> UNESCO Chairs are joint undertakings in which UNESCO joins forces with interested institutions, associations, organizations and potential donors to address specific issues. UNESCO Chairs serve as a global knowledge broker and assume a catalytic role for development in specific fields.

<sup>12/</sup> See "Guidelines and Procedures for the UNESCO UNITWIN Programme" accessible at: <http://unesdoc.unesco.org/images/0014/001439/143918E.pdf>

27. Train-X programmes a common course-development methodology, which assures consistency, high quality and high standards. The methodology, used by various training programmes in the United Nations system, involves the following core steps:

- (a) Careful analysis of training needs and learner characteristics
- (b) Curriculum development and course module design
- (c) Development and testing of course materials using specialist course developers and subject matter specialists
- (d) Course delivery and adaptation through performance-based instruction, validation and continuous revision and improvement.
- (e) Post-training evaluation of the course.

28. The Train-X system fosters the quality, sustainability and cost-effectiveness of the training programmes and maximises the use of resources through the coordinated development and exchange of resource materials, training of trainers, exchange of materials and trainers through the network, and the use of modern technology and training information systems.

29. To this date, the Train-X system has helped elaborate 200 regional and national training centers. Train-X programmes include ITU/CODEVTEL (telecommunications), UNCTAD/TRAINMAR (maritime transport), ICAO/TRAINAIR (civil aviation), UNCTAD/TRAINFORTRADE (international trade), UPU/TRAINPOST (postal service), UNITAR/CC:TRAIN (climate change) and UN-DOALOS/TRAIN-SEA-COAST (coastal and ocean management).

30. Generally, the success of the Train-X programmes has been due to the emphasis placed on quality control and on addressing local training needs. The ultimate goal of Train-X programmes is to build capacity at a local level so as to enable sustainability of local training. Experience from the TRAINMAR program, for example, demonstrates that the sustainability of each program depends upon the effective training of the national course developers, instructors and tutors and providing them with the appropriate tools. It also shows that distance learning has the potential to respond to local needs and take into account local capacities by going beyond the training packages offered through the conventional methodology.

31. The above case-studies provide a number of practical experiences and lessons that could useful in developing collaborative initiatives and partnership arrangements between universities and other institutions involved in biosafety education and training.

### **III: STRATEGIES AND MECHANISMS FOR ENHANCING COLLABORATION IN BIOSAFETY EDUCATION AND TRAINING: KEY CONSIDERATIONS BASED ON THE EXPERIENCE AND LESSONS LEARNED FROM RELEVANT INITIATIVES**

32. Collaboration between universities and other training institutions can be fostered through a wide range of strategies and activities. Examples include the following:

- (a) Joint curriculum development;
- (b) Joint student instruction and supervision;
- (c) Joint research programmes;
- (d) Sharing of training materials;
- (e) Scholarly exchanges involving both students and faculty;
- (f) Scholarship and fellowship programmes;

- (g) Scholarly networks; and
- (h) Organization of joint seminars, conferences and discussion forums on critical issues.

33. There are different models of collaboration between universities and other higher education institutions. These include: twinning, academic credit transfer arrangements, licensing or franchising, integrated programmes and joint awards and online course delivery (Adams, 1998). <sup>13/</sup>

(a) *Twinning* involves the establishment of formal linkages or collaborative working relationships between two or more university faculties or departments with common interests, for example through bilateral/multilateral agreements or memoranda of cooperation. This model provides opportunities for professional development (for both staff and students of the participating institutions) and fosters improvement of teaching methods and program content, and enhances the quality of student supervision and evaluation. Furthermore, it promotes cooperative planning and development of instructional programmes, results in increased access to information and training resources and fosters collaboration among university students and faculty. Under the twinning arrangement students can undertake part of their studies at the "parent" university and complete the remaining years of their studies at, and earn a degree of, the partner university.

(b) *Inter-university academic credit transfer arrangements* allow for mutual academic recognition between partner institutions and enable students to transfer academic credits. Many universities in Europe and North America use this system. For example, in 1989 universities within the European Union and the European Economic Area countries, as part of the Erasmus Programme, established a common European Credit Transfer and Accumulation System (ECTS) as a means of promoting cooperation between institutions of higher education and improving student mobility, the quality of education and academic recognition for study abroad. <sup>14/</sup> ECTS credits are obtained after the successful completion of the work required (including attending lectures, seminars, independent and private study, preparation of projects), and/or by passing an examination or other assessments. The ECTS and other similar systems help to create transparency, to enhance collaboration between institutions and to widen the choices available to students.

(c) Under the "*franchisee*" or *licencing arrangements*, a foreign university grants permission to, or establishes a partnership with another university or institution, to deliver a specific course and conduct the examinations with its name. The parent university institution decides the course curriculum and design, the examination process and evaluation methods and other issues pertaining to the delivery of the course.

(d) *Integrated study programmes and joint awards* involve joint development of academic programmes and award of joint academic qualifications by two (or more) universities within a negotiated collaboration agreement. <sup>15/</sup> Students can chose to undertake defined study programmes (in terms of duration and content) at both universities. At the end of the course, and after the relevant joint supervision and examinations, students are awarded either a single qualification jointly signed by the academic authorities of both institutions (joint degree) or the final national qualifications of both institutions (double degree).

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<sup>13/</sup> Adams, A (1998) "The operation of transnational degree and diploma programmes: the Australian case" in Journal of studies in international education, 2(1). Spring 1998.

<sup>14/</sup> Under the ECTS, 60 credits measure the workload of a full-time student during one academic year (or 30 credits per semester). Typically, one credit stands for around 20-30 working hours and each course of 2 hours of lectures/seminars per week represents 3 ECTS credits, see:  
[http://ec.europa.eu/education/programmes/socrates/ects/index\\_en.html](http://ec.europa.eu/education/programmes/socrates/ects/index_en.html).

<sup>15/</sup> See further information about integrated study programmes at:  
<http://www.cimea.it/servlets/resources?contentId=2819&resourceName=Inserisci%20allegato>



(e) *Internet-based distance learning* is another mechanism through which universities and other institutions are increasingly collaborating to offer education and training programme in different fields. Modern information communication technology tools have enabled universities to collaborate in developing and delivering courses in a more cost-effective manner. Such tools include web portals which allow restricted access to online course modules, discussion forums, virtual libraries, interactive databases and other infrastructure for e-learning. A number of universities, for example those participating in the global biosafety training network sponsored by the United Nations Industrial Development Organization (UNIDO) are offering biosafety courses primarily through online distance learning tools. <sup>16/</sup>

## VI. CONCLUSION AND RECOMMENDATIONS

34. Collaboration between academic institutions and organizations involved in biosafety education and training is an essential component of the efforts to assist countries to build their human resources for the effective implementation of the Cartagena Protocol on Biosafety. Collaborative initiatives and networks would contribute to joint development and transfer of knowledge, skills and know-how and help in improving the overall quality of biosafety education programmes.

35. Accordingly, it is important to put in place strategies and mechanisms to strengthen and/or facilitate the establishment of new collaborative initiatives and partnership arrangements. One possible strategy could be to establish regional or sub-regional programmes to promote the development of new degree-granting programmes in biosafety (and/or the expansion of existing ones) and to establish networks of universities and organizations involved in biosafety education and training. Such networks would:

- (a) Facilitate the sharing of information, knowledge and expertise;
  - (b) Foster collaboration and twinning arrangements;
  - (c) Facilitate the sharing of teaching and research materials;
  - (d) Promote faculty and student exchanges;
  - (e) Promote the development and implementation of joint curriculum or research initiatives;
- and
- (f) Identify opportunities to stimulate cooperation between the universities at different levels.

36. It is recommended that, as a first step, relevant academic institutions and centres of excellence in the different regions (including Africa, Asia-Pacific, Central and Eastern Europe and Latin America and the Caribbean) should designate lead institutions and focal points to spearhead and coordinate the development and implementation of the regional programmes referred to in the preceding paragraph. It would also be useful to establish a regional steering group comprised on representatives from each of the participating institutions.

37. Furthermore, academic institutions in the different regions and sub-regions which are interested in developing biosafety courses may wish to hold consultative planning meetings to discuss options and modalities of developing the regional programmes. The meetings could also discuss other strategies for promoting collaboration in the development and delivery of biosafety education and training programmes.

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<sup>16/</sup> See: [http://binas.unido.org/wiki/index.php?title=Main\\_Page](http://binas.unido.org/wiki/index.php?title=Main_Page)

38. It is also recommended that a Steering Group should be established at the global level to provide advice and guidance in the development and implementation of the regional/ sub-regional programmes. The Steering Group may be convened and serviced by the CBD Secretariat.

39. Participants are invited to:

(a) Discuss and make recommendations on the modalities of establishing regional or sub-regional programmes to promote the development of new, and or expansion of existing, biosafety degree and diploma-granting programmes in developing countries;

(b) Identify regional lead institutions and persons to, on interim basis, spearhead and coordinate the development and implementation of the regional programmes referred to above, mobilise funding for them and organize the first regional consultative meetings;

(c) Develop and adopt terms of reference of the global Steering Group and the criteria for determining its composition.

(d) Select members of the global Steering Group to serve on an interim basis.

40. Participants are also invited to make recommendations, as appropriate, to the COP-MOP and other stakeholders regarding actions necessary to promote longer-term education and training in biosafety, including the development of new biosafety degree and diploma-granting programmes, and to foster collaboration between institutions involved in biosafety education and training.

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