

Human Ecology Training Programmes: The International Centre For Human Ecology – Centre International D'Écologie Humaine Network

Luc Hens, Jennifer Ahimbisibwe, Marika Bakonyi Moeschler, Marika Bakonyi Moeschler, Patrick Baudot, Jean-Luc Bonniol, Beat Bürgenmeier, Philippe Lefèvre-Witier, José Manuel P. B. de Mascarenhas, Francis Ribeyre, Massimo Riolfatti and Teresa Veiga

INTRODUCTION

The teaching of human ecology that is representative for the activities of the International Centre for Human Ecology – Centre International d'Écologie Humaine (CIEH) started in 1972 by the creation of the certificate of specialisation in human ecology at the Faculty of Sciences of the University of Geneva (Switzerland). This certificate was characterised by emphasis on interdisciplinarity studies. In 1973, the vice-chancellor of the University of Geneva and the president of the University of Paris V passed a convention by which they jointly created, in their respective universities a certificate of specialisation in human ecology. In the same year, the convention was extended to the University of Toulouse III. The convention foresees a possibility of extension to other universities through agreements between, on the one hand the president or the vice-chancellor of the concerned university and on the other hand, the president or the vice chancellor of each of the three founding universities (Geneva, Paris V and Toulouse III). Subsequently, a number of universities signed into the convention in the following order: 1974, the Université de

Bordeaux I (France) and the Aix-Marseille II (France); 1975, the Université Libre de Bruxelles (Belgium) and the Vrije Universiteit Brussel (Belgium); 1976, the Università degli studi di Padova (Italy). Currently the membership stands at 12 (Table 1) universities that have signed the convention.

The European Regional Office of World Health Organisation (WHO) being most interested in particular in the complex links between health and environment, endorsed the framework of studies in human ecology in the CIEH member universities. It was agreed between the European Regional Office of WHO and member universities that a certificate under the auspices of the former could be awarded to students graduating from Human Ecology in the member universities.

In June 1978, the management committee and the council of the certificate, decided to replace the convention of 1973 with a new one. In article 1 of the new convention, the members agreed to jointly organise an international certificate in human ecology (certificat international d'écologie humaine – CIEH). The certificate is accessible to individuals with a wide range of university degrees (CIEH, 1978). The objectives of the certificate (CIEH) are provided in article 2 of the Convention: “the certificate is intended to train qualified people having to deal with the problems raised by the interactions between man and his environment. It brings interdisciplinarity and international university co-operation to continuing education” (CIEH, 1978). The methods of teaching were re-examined in 1984, which in practice meant that emphasis was placed more on discussions and interactive training methods and less on traditional “ex cathedra” lectures. What links these universities in practice is there general view on human ecology and the advantages they see in interuniversity collaboration (Hens, 1990). The network is not a system of rigid instructions among the partner

Table 1: The CIEH member universities and their countries of location

<i>University name</i>	<i>Country</i>
1) Universités de Bordeaux	France
2) Université de Genève	Switzerland
3) Université de Provence (Aix-Marseille 1)	France
4) Université d'Aix-Marseille	France
5) Università degli Studi di Padova	Italy
6) Université Paul Sabatier - Toulouse	France
7) Universidade de Évora	Portugal
8) Universidade Nova de Lisboa	Portugal
9) Vrije Universiteit Brussel	Belgium
10) Université de Pau	France
11) Université Libre de Bruxelles	Belgium
12) Université de Paris V	France

universities to have similar programmes. An important feature that underlies the common goals of the CIEH activities is the common interpretation of human ecology by member programmes. This is given in the definition established in Peyresq (France) at the occasion of a meeting organised in 1982 after 10 years of experience with human ecology. The participants agreed on the definition of human ecology “as a reflection on science and the social conceptual framework, which precisely means that human ecology starting from different basic trainings, makes a methodological step forward in the study of the bio-cultural dynamics of ecosystems.” The definition puts emphasis on the interdisciplinary nature of human ecology, its methodological approach as well as its integrating and global vision.

This study overviews the current activities of the CIEH programmes, both on the basis of qualitative and quantitative data about the programmes. The data are useful to describe and analyse the collaboration of the partner universities and allow to compare the CIEH activities with those of similar programmes in other parts of the world. The overall objective of this study is to gather key data about CIEH programmes and in order to do so each CIEH programme is to provide: a descriptive analytical profile based on core figures of for example study load, student registration and graduation data, number of promotions; a discussion of the range of approaches used to explain Human Ecology in each programme; a prospective view on how the programme will evolve especially after the Bachelor’s – Master’s transition in the European Union (Bologna Declaration).

MATERIAL AND METHODS

The material for this study is information gathered from CIEH members (respondents) by means of a questionnaire. CIEH members agreed to complement the information gathered by questionnaire during a subsequent review meeting in Geneva in May 2003. The task of drafting and administering the questionnaire was assigned to the current holder of the CIEH network chair, Human Ecology Department, VUB. A questionnaire was designed and sent out to the 12 CIEH members (Table 1) by email on the 18th of February 2003. All CIEH members received the questionnaire. The questionnaire (Annex 1)

was composed of open-ended questions falling under 4 main headings: (1) administrative information (2) core figures characterising the programme (3) quality aspects and (4) future. Open ended type of questions were used because they would yield more complete information about the programmes as compared to closed end questions. The respondents were given approximately one month (up to 15th March 2003) in which to return the completed questionnaires. By the above date, none of the CIEH members had returned the completed questionnaire and so a reminder was sent out to all members through email and followed up by telephone calls. In the subsequent 1.5 months, a total of 9 members responded. In the universities of Paris V, and Université Libre de Bruxelles, the programme is currently suspended and so these two did not take part in the study. At Pau University, it was judged that the questionnaire data do not provide an accurate picture of the programme and therefore they too decided not to participate.

The information received was summarised in tables and transmitted to members on 1st May 2003 in preparation for the review meeting to be held on 12 May 2003 in Geneva. During the meeting, points that were not clear in the questionnaire were clarified and where information was missing, the concerned members agreed to provide it by 25th May 2003. A framework structure of the resulting paper was also discussed and agreed upon. Additional data was provided by members and this was proceeded by revision of the data and preparation of this paper. The data gathering procedure described above is summarised in Figure 1.

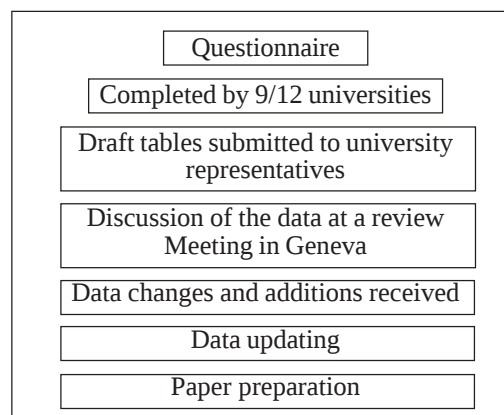


Fig. 1. Data gathering procedure

RESULTS**Response**

Questionnaire responses were received from

9 out of 12 respondents to which the questionnaire was sent. The percentage response was therefore 75%. Table 2 provides a summary of the

Table 2: Administrative information of 9 CIEH programmes included in this review

<i>Programme name</i>	<i>University name</i>	<i>Name of academic responsible&Email</i>	<i>Address</i>	<i>Telephone # Fax #</i>
Diplôme Universitaire d'Ecologie humaine (DUEH-Bo)	Universités de Bordeaux (University of Bordeaux)	Prof. Francis Ribeyre francis.ribeyre@egid.u-bordeaux.fr	Av. Des Facultés, 33405 Talence Cédex France	+33 5 56 84 8077 +33 5 56 84 8073
Master in Human Ecology (MHE-Br)	Vrije Universiteit Brussel (VUB) (Free University Brussels – Flemish)	Prof. Dr. Luc Hens human.ecology@vub.ac.be	Laarbeeklaan 103, 1090 Brussels Belgium	+32 477 49.47 +32 477 4960
Certificat international d'ecologie humaine (CIEH-Ge)	Université de Genève (University of Geneva)	Prof. Beat Bürgenmeier Beat.Burgenmeier@se.unige.ch	UNI-MAIL 40, boulevard du Pont d'Arve CH -1211 Genève Switzerland	+41 22 705 81 75 +41 22 705 81 73
Certificate International d'Ecologie Humaine option "développement durable des pays du sud" (CIEH-Dd)	Université de Provence (Aix-Marseille 1) (University of Aix-Marseille 1)	Dr. Patrick Baudot Patrick.Baudot@up.univ-mrs.fr	Laboratoire de Population-Environnement Université de Provence Place Victor Hugo F-13331 Marseille – Cedex 3, France	+33 4 91 10 6357 +33 4 91 08 3036
Certificate International d'Ecologie Humaine option Ecologie humaine et santé (CIEH-Es)	Université d' Aix-Marseille (University of Aix-Marseille)	Prof. Jean-Luc Bonniol jean-luc.bonniol@wanadoo.fr	38, ave de l'Europe 13090 Aix-en-Provence France	+33 4 42 95 2420 +33 4 42 95 0209
Corso di perfezionamento in Ecologia Umana – Certificato Internazionale di Ecologia Umana (CPEU-Pa)	Università degli Studi di Padova (University of Padua)	Prof. Massimo Riolfatti massimo.riolfatti@unipd.it centro.ecologia.umana@unipd.it	Centro Di Ecologia Umana Centro di Ateneo di ricerca e di servizi Università degli studi di Padova Via VIII Febbraio, 2 35122 Padova, Italy	+49 827 3024 +49 827 3039
Cycle Hommes et Environnement (CHE-To)	Université Paul Sabatier – Toulouse (University of Toulouse)	Dr. Ph. Lefèvre-Witier plw@cict.fr	C.I.G.H.-C.N.R.S., Hôpital Purpan, 31300 Toulouse France	+33 5 61 49 5888 +33 5 61 49 90 36
Mestrado em Ecologia Humana (MHE-Ev)	Universidade de Évora (University of Evora)	Prof. José Manuel P. B. de Mascarenhas jmm@uevora.pt	Dêpartmento de Ecologia, Colégio Luis António Verney Rua Romão Ramalho, 59 7000-671 Évora, Portugal	+351 266 745385 +351 266 70 9498
Mestrado em Ecologia Humana e Problemas Sociais Contemporâneos (MEH-Li)	Universidade nova de Lisboa (University of Lisbon)	Prof. Dr. Teresa Veiga RodriguesTeresa@mail.telepac.pt	ISEGI Travessa Estevao Pinto (Campolide) Pt – 1070-124 Lisboa, Portugal	+351 21 387 1573 +351 21 387 2140

administrative information of the respondents. From table 2, it can be seen that the respondents consist of 4 universities from France, 1 from Belgium, 1 from Switzerland, 1 from Italy and 2 from Portugal giving a total of 9 respondents.

PROMOTIONS AND ALUMNI

The most experienced programmes are those in the universities of Geneva, Toulouse and Bordeaux and the youngest is that one at the University of Lisbon (Table 3). Most of the programmes have yearly promotions except for that in Toulouse where promotion does not follow a regular sequence. The programme in Toulouse did not take in students during the academic years 2000/2001, 2001/2002 and 2002/2003. It is scheduled to resume enrolment in the academic year 2003/2004. 1,239 students completed the degree over the activity period of almost 30 years; Bordeaux is the university with most alumni (400), it is followed by VUB in Brussels, Padua in Italy and Evora in Portugal with 262, 160 and 115 graduates respectively. The programmes in Toulouse and Lisbon have the lowest number of graduates (30). It is worth noting that the University of Bordeaux, within the network

comprises of 4 universities namely: Université Bordeaux 1 – Sciences Technologies, Université Bordeaux 2 – Victor Segalen, Université Michel de Montaigne Bordeaux 3 and Université Montesquieu Bordeaux 4. The average number of promotions is 16 years in the activity period 1973 to 2003. Also, worth noting is the difference in the degree awarded by the programmes: the programmes in Brussels, Evora and Lisbon award masters degree in human ecology which fits within the Europe-Anglosaxon system; the programmes in Toulouse, Marseille and Bordeaux award postgraduate university degrees, this system is characteristic for France; the programme in Geneva and that in Padua, respectively award complementary certificate of human ecology and advanced course of specialisation in human ecology, these fit within the international certificate in human ecology (just like the rest) but are less visibly identifiable with a particular system.

MANAGERIAL APPROACHES

Table 4 shows that all the 9 programmes that responded have 2 years of study and they all involve presentation of a thesis or an equivalent

Table 3: Promotions and number of alumni by programme

<i>Programme name</i>	<i>Year of creation</i>	<i>Number of promotions recent</i>	<i>Most recent promotion</i>	<i>Number of alumni</i>	<i>Official name of degree</i>	<i>English Interpretation of degree designation</i>
CIEH-Ge	1973	25	2002	82	Certificat complémentaire en écologie humain	Complementary certificate of human ecology
CHE-To	1973	11	1999	30	Diplôme d'Université en Ecologie Humaine	University degree in human ecology
DUEH-Bo	1974	27	2002	400	Diplôme Universitaire d'Ecologie Humaine	University degree in human ecology
CPEU-Pa	1976	22	2002	160	Corso di Perfezionamento in Ecologia Umana	Advanced course of specialization in human ecology
CIEH-Dd	1986	16	2002	80	Diplôme d'Université	University degree
CIEH-Es	1986	16	2002	80	Diplômé d'Université	University degree
MHE-Br	1988	13	2002	262	Master in Human Ecology	Master in human ecology
MHE-Ev	1990	7	2002	115	Mestrado em Ecologia Humana	Master in Human Ecology
MEH-Li	1997	6	2002	30	Mestrado em Ecologia Humana e Problemas Sociais Contemporâneos	Master in Human Ecology and Contemporaneous Social Problems
Total / range	1973 -1997	Average = 16	1999 and 2002	1,239		

Table 4: Study load by programme

<i>Programme name</i> <i>years</i>	<i>Number of study</i> <i>(per year)</i>	<i>ECTS² load</i>	<i>Thesis/</i> <i>equivalent</i> <i>work</i> <i>(Yes / No)</i>
CIEH-Ge	2	30	Yes
CHE-To	2		Yes
DUEH-Bo	2	30	Yes
CPEU-Pa	2	24 CFU ³	Yes
CIEH-Dd	2	30	Yes
CIEH-Es	2	30	Yes
MHE-Br	2	60	Yes
MHE-Ev ¹	2		Yes
MEH-Li ¹	2		Yes

¹ At the moment these programmes are not operating under the ECTS system and to adopt to the ECTS system is one of the modifications that is foreseen for the near future of the programmes.

² ECTS European Credit Transfer System: ECTS credits are a value allocated to course units to describe the student workload required to complete them. They reflect the quantity of work each course requires in relation to the total quantity of work required to complete a full year of academic study at the institution, that is, lectures, practical work, seminars, private work- in the library or at home- and examinations or other assessment activities. Credits thus express a relative value. The objective of ECTS is to guarantee academic recognition of studies abroad.

³ CFU Credito Formativo Universitario (University Credit System): This is the same as ECTS. It is the workload that a student in a particular course has to accomplish per academic year.

research paper in the second year of study. However, only the programme in Brussels has 60 ECTS points study load (which coincides with a full time study programme) for each of the two study years. The study load in the programmes in the other universities is only half of 60 as they are more explicitly targeted towards participants that continue to work as they study.

The summary of the objectives presented in table 5 shows that there is heterogeneity in objectives. However, it can also be observed that all the objectives are centred on the human-environment relationship and associated problems. Key elements in the objectives include the following: multidisciplinary, human environment, culture, sustainable development, health and environment. The overview of the objectives also points to a diversification of the programmes: the programmes in Marseille for example are clearly targeted towards health on the one hand and North-South relationships on the other hand. The programmes in Brussels and Lisbon show strong emphasis on (environmental) management, while the programmes in Bordeaux and Toulouse are much more targeted to reflection

and theoretical approaches.

When it comes to the themes that are covered in the 9 programmes, a number of intersections are observed. Table 6 shows the themes as well as keywords that are common to 2 or more programmes. The most common theme is health followed by ecosystems and environment. However, in general all themes relate to the human environment relationship.

To realise the objectives and therefore the themes, a variety of pedagogical approach methods are applied in the different programmes. The method that is common to all the programmes is lectures (Table 7). However and very much in line with the 1984 re-examination of teaching methods, equally common are interactive pedagogical approach methods like seminars, workshops and discussions. Bibliographical analysis is only in the universities in Marseille. It is used both as an evaluation tool for reading work and as a basis for group discussions with the help of trainers. One fairly recent pedagogical approach that is missing in all the programmes is distance learning. Only the programme in Brussels has optional courses.

OUTPUT OF THE PROGRAMMES

In table 3, it has been shown that a total of 1,239 students have graduated from the 9 programmes under consideration. In table 8, it can be observed that the graduates are mainly employed in government and NGOs. Even though the majority of the programmes (6/9) do not collect data on their alumni, they are in correspondence with their alumni and so in general are aware of what they are doing. When it comes to the question of whether the employment of the graduates is environment related, a mixed picture is obtained ranging from strong positive (Brussels and Padova) to very weak positive (Bordeaux) or no response (Geneva, Aix-Marseille 1 and Evora).

QUALITY ASSURANCE IN THE PROGRAMMES

In all of the programmes under study, some kind of evaluation is carried in order to ensure a continuous improvement of the concerned programme. As can be seen from table 9, the evaluation is done by the students, trainers and external experts and the instruments used include questionnaires, forms, discussions etc. However,

Table 5: Objectives by programme

<i>Programme Name</i>	<i>Description of Objectives</i>	<i>Key words</i>
CIEH-Ge	• Contribute to the improvement of the quality of life in cities, rural areas and at work.	Quality of life, cities, rural areas, work places
CHE-To	• To identify the most evident specificities of the human species • Approach the systematic structure of the relationships between human populations and their various environments • Provide the knowledge of certain concepts necessary for the understanding of ecosystems, their functioning and their evolution • Make students aware about how a sustainable future necessitates a permanent multidisciplinary approach • Guide to consciousness and responsibility of the chaotic disequilibrium existing up to now in the management of the planet.	Cognitive capacity, adaptability, communication, consciousness, spiritualism, Management, feedbacks, regulations, physical environment, cultural environment and social environment Ecosystem functioning, evolution Sustainability, multidisciplinary disequilibrium
DUEH-Bo	• To introduce students to a very broad vision of various cultural and scientific components of human ecology	Culture, science
CPEU-Pa	• To provide the knowledge and expertise for grasping the problems concerning the relationship between people and the environment in the complexity of the spatial and temporal relations	People, environment, spatial relations, temporal relations
CIEH-Dd	• To study the relations between the human populations and their environment, naturalness or anthropized, mainly in the countries of the South	Human populations, environment, naturalness, anthropology, developing countries
CIEH-Es	• To provide a comprehensive training on human ecology, focusing on ecology, anthropology and health	Ecology, health, anthropology
MHE-Br	• Deal with sustainable development • Give education about the social, physical and cultural environment to understand environmental problems. • Training people to have a full understanding of the human ecological problems, to stimulate analytical thinking and to find solutions taking into account all the factors involved.	Sustainable development, social environment, physical environment, cultural environment, environmental problems
MHE-Ev	• To prepare qualified people to understand Man-Environment mutual relationships and to deal with environmental problems and sustainable development issues	Man-environment relationship, environmental problems sustainable development
MEH-Li	• To develop reflection and interdisciplinary investigation on relations between man and his physical, social and cultural environments. • To evolve economic and social responsibility towards social and cultural dimensions of the environment. • To emphasize the importance of ecological perspective in regional and local planning and to find the most adequate solutions for some of the main contemporaneous social problems.	Man, physical, social and cultural environments Economic responsibility, social responsibility, environment Ecological perspective, regional and local planning, contemporaneous social problems

the programmes that are evaluated by all the three categories of people (students, trainers and external experts) are those in Geneva, Aix-Marseille, Brussels, Evora and Lisbon.

DISCUSSION

The overall objective of this study was to gather key data about the CIEH programmes and so bearing this mind, in this section the main trends that emerged from the data are going to be discussed along three lines: promotions and alumni, objectives, themes and pedagogical

approach and output of the programmes.

Our results showed that a total of 1,239 students had completed their studies in the 9 programmes in the activity period of about 30 years (1973 – 2003). The distribution of the 1,239 graduates was not even and was not necessarily according the number of years of teaching human ecology for example Toulouse which has had human ecology since 1973 has 30 graduates while the university in Brussels, which has had human ecology since 1988 has 262 graduates. A partial explanation for this trend is that some of the

Table 6: Themes and Issues common to 2 or more programmes

<i>Themes</i>	<i># of mentions (-/9 Univ.) (university code)</i>	<i>Keywords</i>	<i># mentions (-/9 Univ.)(University code)</i>
Health	6 (DUEH-Bo, MHE-Br, CIEH-Dd, MHE-Ev, CIEH-Es, MEH-Li)	Demography	5 (MHE-Br, CIEH-Dd, MHE-Br, CHE-To, MEH-Li)
Ecosystems	4 (DUEH-Bo, MHE-Br, CPEU-Pa, MHE-Ev)	Sustainable development	4 (MHE-Br, MHE-Ev, CIEH-Dd, MEH-Li)
Environment	4 (DUEH-Bo, MHE-Br, CIEH-Ge, MHE-Ev)	Air	3 (MHE-Br, CPEU-Pa, MHE-Ev)
Human society	3 (MHE-Br, MHE-Ev, MEH-Li)	Water	3 (DUEH-Bo, MHE-Br, CPEU-Pa)
Environmental management	2 (MHE-Br, MEH-Li)	Anthropology	3 (MHE-Br, MHE-Ev, MEH-Li)
		Economics	3 (MHE-Br, MHE-Ev, MEH-Li)
		Psychology	3 (MHE-Br, MHE-Ev, MEH-Li)
		Environmental management	2 (DUEH-Bo, MHE-Ev)
		Environmental problems	2 (CPEU-Pa, MHE-Ev)
		Urbanisation	2 (CIEH-Dd, CHE-To)
		Soil	2 (MHE-Br, CPEU-Pa)

Table 7: Pedagogical approach and course types

<i>Programme name</i>	<i>Pedagogical approach</i>	<i>Proportion of course types¹</i>		
		<i>Introductory Courses (%)</i>	<i>Specialisation courses (%)</i>	<i>Optional courses (%)</i>
CIEH-Ge	Seminars, exercises, lectures	30	70	0
CHE-To	Seminars, group discussions, field visits, lectures	30	70	0
DUEH-Bo	Lectures, seminars, group discussions, readings, tutorials individual research work, bibliographic analysis	60	40	0
CPEU-Pa	Lectures, group discussions, practicals, seminars, readings	40	60	0
CIEH-Dd	Lectures, tutorials, debates, bibliographical analysis	25	75	0
CIEH-Es	Lectures, readings, bibliographical analysis, conferences, tutorials, tests, dissertation, video projections	25	75	0
MHE-Br	Group discussions, workshops, projects, seminars, field visits, practicals, presentations, exercises and lectures	0	67	33
MHE-Ev ²	Lectures, practicals, exercises, workshops, seminars, field visits	50	50	0
MEH-Li ³	Lectures, group discussions, workshops, projects, presentations, exercises			

¹ For most programmes, the information provided under proportion of course types is an average percentage situation in the two years of study.

² Percentages provided under proportion of course types are only for the first year of study, the second year of study is made up 100% by specialisation courses.

³ Programme is under review by the Scientific Commission and so information on proportion of course types could not be available.

Table 8: Employment of alumni

<i>Prog. name</i>	<i>Programme collects data on its alumni</i>	<i>Main sector of employment</i>	<i>Employment environment related (%)</i>	<i>Matching programme objectives</i>
CIEH-Ge	No	?	?	?
CHE-To	No	Private, Government, NGO, Unemployed	30	Yes
DUEH-Bo	No	Private, Government	5	Yes
CPEU-Pa	Yes	Private and Government	86	Do not know
CIEH-Dd	No	NGO & Government	?	?
CIEH-Es	No	NGO	50	No – objectives diversified
MHE-Br	Yes	Government	85	Yes
MHE-Ev	No	Government	?	Yes
MEH-Li	Yes	Education	40	Diversified target groups and objectives

? means that no response was provided for that question/statement

programmes did not run continuously since after their start and this is the case for the programme in Toulouse and that in Bordeaux. In addition some of the programmes for example that in Toulouse do not have yearly promotions, that is the promotions do not follow a regular sequence. Moreover, in our study we only considered students that complete the two years of studying and so left out those students that leave the programmes after the first year of study, on obtaining a certificate. The numbers of the latter students are appreciable in each of the programmes. Furthermore, the number of students that register every academic year also affects the number that graduate. An example can be taken from the programme in Bordeaux which after not running in the academic year 2001-2002, reported a decline in the number of students registered in the academic year 2002-2003 from an average of 50 in previous academic years to 18. The suspension was related with the restructuring of the programme in the four universities of Bordeaux.

The general picture that emerges from the objectives, themes and pedagogical approaches in the programmes is that the programmes are all targeted towards the transdisciplinary knowledge of humans and their culture in an ecosystem context. There are a number of common elements in the objectives, themes and pedagogical approaches of the programmes. This may be an indication that even though the programmes are heterogeneous, the underlying goal of the programmes is the same and it is, as started in the 1978 CIEH convention, to train qualified people to deal with the problems raised by the interactions between man and his environment. The

pedagogical approaches in particular exhibit a good mixture and/or balance between non-interactive methods like lectures with interactive methods like discussions, seminars. This, among other things shows that the programmes have been evolving over the years in response to the needs and expectations of the beneficiaries.

Analysis of the output of the programmes shows that not all graduates have an environment related job; a mixed picture is actually displayed. This may be an indication that the students who enrol for the programmes are not necessarily working in the environment sector or if they are, they do not go back to their previous employers after graduation. Moreover, the environment sector is still very young/small especially in developing countries and so finding placement in that sector is not easy even with the right qualifications (personal experience). Also (again from personal experience), not all students take human ecology with the aim of being employed in the environmental sector. For quite a number of them an intellectual discussion on how to analyse, measure and manage complexity in the human-environmental relationships is sufficiently rewarding.

CONCLUSION

The diversity as well as the areas of intersection in the characteristics of the programmes that emerge from the study serve to show that the potential of the collaboration amongst the programmes is very high. In addition, the information that has been put together in this study has hidden usefulness when it comes identifying areas where the support of the network (CIEH) is and/or will

Table 9: Programme evaluation – quality assurance

<i>Prog. name</i>	<i>By students (Instrument)</i>	<i>By trainers (Instrument)</i>	<i>By external experts (Instrument)</i>
CIEH-Ge	Questionnaire	Meetings	Framework of CUEH ² evaluation
CHE-To	Discussions	No	No
DUEH-Bo	Questionnaire	Discussion with students	No
CPEU-Pa	No	Meetings	Yes, Scientific council but the instrument used is not given
CIEH-Dd	Discussions	No	No
CIEH-Es	Questionnaire	Questionnaire	Questionnaire
MHE-Br	Evaluation forms	Module meetings	Framework of VLIR ¹ evaluations
MHE-Ev	Questionnaire	Yes but the instrument used is not given	Yes, Educational committee but the instrument used is not given
MEH-Li	Oral questions	Module meetings	Evaluations discussed at the programme council

¹ VLIR: Vlaamse Interuniversitaire Raad (Flemish Interuniversity Council)

² CUEH: University Degree in Human Ecology

be needed for example in the re-orientation of the programmes according to the Bologna agreement, creating partnerships between the programmes and industries/companies and in expanding the network.

KEY WORDS Human Ecology Education. CIEH. Man. Environment. Ecosystem

ABSTRACT This study reviews human ecology programme as taught in western Europe by members of the network, International centre for human ecology (centre international d'écologie humaine). The network is composed of a total of 12 universities in Belgium, France, Italy, Portugal and Switzerland and has been in existence since 1973. The human ecology programme in the universities is not identical but what links the universities in practice is there common interpretation of human ecology and the advantages that they

see in interuniversity collaboration. In this study a questionnaire is used to gather characteristic information about human ecology programmes in the partner universities. The information allows for comparisons to be made among the programmes and between these programmes and similar programmes elsewhere. It may also be used as basis for enhanced collaboration among partner universities. The results show existence of diversity as well as areas of intersection in the characteristics of the programmes.

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Authors' Addresses: **Luc Hens**, Vrije Universiteit Brussel, Laarbeeklaan 103, 1090 Brussel, Belgium

Telephone: +32 2 477 4281

Fax: +32 2 477 4964

E-mail: human.ecology@vub.ac.be

Jennifer Ahimbisibwe, Vrije Universiteit Brussel, Laarbeeklaan 103, 1090 Brussel, Belgium;

Marika Bakonyi Moeschler, Université de Genève, UNI-MAIL 40, boulevard du Pont d'Arve CH-1211 Genève, Switzerland;

Patrick Baudot, Université de Provence Aix Marseille 1, Place Victor Hugo, F-13331 Marseille-Cedex 3, France;

Jean-Luc Bonniol, Université de Aix Marseille, 38 ave de l'Europe 13090 Aix-en Provence France;

Beat Bürgenmeier, UNI-MAIL 40, boulevard du Pont d'Arve CH-1211 Genève, Switzerland;

Philippe Lefèvre-Witier, Université Paul Sabatier – Toulouse, Hôpital Purpan, 31300 Toulouse France

José Manuel P. B. de Mascarenhas, Universidade de Évora, Apartado 94, 7002-554 Évora, Portugal

Francis Ribeyre, Université de Bordeaux, Av Des Facultés, 33405 Talence Cédex, France

Massimo Riolfatti, Università degli studi di Padova, Via VIII Febbraio, 35122 Padova, Italy

Teresa Veiga, Universidade novo de Lisboa, Travessa Estevao Pinto, Pt 1070-124 Lisboa, Portugal

ANNEX 1

Questionnaire: Postgraduate training on HE offered by CIEH programmes.**1. Administrative information**

- 1.1. Programme name:
- 1.2. University:
- 1.3. Academic responsible: Name: Email:
- 1.4. Established (year):
- 1.5. Number of promotions (total over the different years):
- 1.6. Total number of students that obtained the certificate over the different years:
- 1.7. Starting date most recent promotion:
- 1.8. Official nomenclature of degree:
- 1.9. English interpretation of 1.8.:

2. Core figures characterising the programme

- 2.1. By programme
 - 2.1.1. Objective(s):
 - 2.1.2. Core issues – themes : by theme provide 3 keywords + eventually 1 sentence of explanation for each keyword:
 - 2.1.3. Structure of the programme:
 - 2.1.4. Teaching methods:
 - 2.1.5. Concepts (interdisciplinary):
 - 2.1.6. Application areas (areas where the previous students find jobs) (5): by application area provide 3 keywords + eventually 1 sentence of explanation for each keyword
- 2.2. Programme content
 - Modules/Courses:
 - By module or course: Title
 - Content by keywords: max. 5
 - Academic responsible
 - Aim:
 - Way of teaching:
 - Append most recent programme
- 2.3. Students: Number of students registered/passed/obtained degree during last 3 academic years: 2000-2001, 2001-2002, 2002-2003
- 2.4. Thesis works:
 - List of thesis works + author(s) over last 3 years
 - Per thesis: max. 5 keywords

3. Quality aspects

- 3.1. Educational philosophy and objectives
 - How are the objectives translated in the final attainment level and how is the final attainment level translated in the content of the programme?
- 3.2. Programme
 - 3.2.1. What is the proportion of general introductory courses - specialisation courses - optional courses within the programme? (%)
 - 3.2.2. What is the proportion of the different educational forms (papers, lectures, practicals, workshops, group discussions,) used in the programme? (%)
 - 3.2.3. How many scientific publications result directly or indirectly from the Human Ecology programme? (see table below)

	<i>Books/ Chapters in books</i>	<i>Publications in national journals</i>	<i>International peer-reviewed articles</i>	<i>Book reviews Conference proceedings</i>	<i>Reports</i>
1998					
1999					
2000					
2001					
2002					

Attach reference list

3.2.4.	What is the proportion national/international professors who are teaching in the programme?			
3.2.5.	How are recent developments in information technology used in the programme (e.g. computer courses, use of information technology within courses, for thesis work, etc.)?			
3.2.6.	Are there similar or related programmes within the country?			
3.3.	Efficiency of the programme			
3.3.1.				
<i>Interest in the programme</i>		<i>2000-2001</i>	<i>2001-2002</i>	<i>2002-2003</i>
Number of applicants				
Number of registered students				
Ratio student/applicants				
3.3.2.	Employment degree and employment domain of the alumni:			
	(-) Does the programme collect data on the employment of the alumni?			
	(-) What are main sectors (private, government, NGO, unemployed) where the alumni found a job?			
	(-) Profession related with environmental/ecological aspects: Yes/No (%)			
	(-) Do the final employment profiles match with the objectives of the programme?			
3.4.	Educational evaluation : How is the programme internally evaluated ?			
3.4.1.	Is an educational or curriculum committee present to evaluate the programme?			
	What is the composition of this committee?			
3.4.2.	Do the students, teachers and/or external experts get involved in this evaluation?			
	In what manner?			
4. Future				
4.1.	How will the programme be called after the Bachelor's - Master's transition?			
4.2.	Are programme modifications foreseen in the near future (programme structure, programme content, professors, infrastructure, national/international collaboration, etc)?			
4.3.	In which way can the CIEH contribute to realise the programme targets in the future?			