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Evaluation of UNESCO-IHE Institute for Water Education

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TABLE OF CONTENTS

1. Executive Summary	4
2. Evaluation Background, Focus and Purpose	10
2.1 Background of UNESCO-IHE	10
2.2 Mandate of UNESCO-IHE	10
2.3 Objectives of UNESCO-IHE	10
2.4 The evaluation	11
2.5 Focus of external evaluation	11
2.6 The primary Questions	11
3. Evaluation Methodology	12
3.1 External evaluation committee	12
3.2 Scope of the evaluation	13
3.3 Process of the evaluation	13
4. Quality, Performance and Output	14
4.1 Quality of education and research	14
4.2 Performance and Output	19
5. IHE as UNESCO Institute	21
5.1 General	21
5.2 Benefits	21
5.3 Coordination and interaction	24
6. Financial Relations with Dutch Ministries	26
6.1 General	26
6.2 Subsidy and additional funding	26
7. Future Viability of UNESCO-IHE	28
7.1 Relevance of the programme	28
7.2 Finances	28
Annexes	
I Relevant documents	33
II List of interviewees	35
III Terms of Reference (TOR) for the Evaluation of UNESCO-IHE	37
IV List of Abbreviations and Acronyms	45

1. EXECUTIVE SUMMARY

Focus of external evaluation

The external evaluation committee was asked to advise whether the Government of the Netherlands should continue its contribution for a further fixed-term period. Besides the evaluation also included:

- the effects of the integration with UNESCO;
- the positioning of the Institute in the Dutch Higher Education system,
- the level of the contribution to the Institute by OCW (Dutch Ministry of Education, Culture and Science), and
- the relevance and impact of UNESCO-IHE's programmes and services to key stakeholders.

Strategy of UNESCO-IHE

The worldwide environmental concern and the developmental debates over large dams and water structures requires of civil engineers that they go beyond their conventional discipline into social, legal and ecological areas. The Institute is addressing these new strategic choices in their research efforts. It defines three priority research themes: (1) *Water Security*, (2) *Environmental Integrity* and (3) *Urbanization*; and in addition, two cross-cutting themes: (4) *Information and Communication Systems*, and (5) *Water Governance*.

Education

The education programmes of UNESCO-IHE are accredited by the Dutch Flemish Accreditation Board and therefore totally meet the norms that are applied in Dutch and international higher education. UNESCO-IHE is the only institution in the UN system with the right to confer accredited MSc degrees in water and environment.

Following the recommendations of an External review Committee the Institute has started a didactical innovation process directed to strengthening of problem-based and interdisciplinary learning. The programs are also harmonised with the priorities set for research.

MSc education in Delft will further shift towards joint MSc programs with capable partner institutions in the developing world. The shift ensures the development relevance of UNESCO-IHE's programs.

The quality and effectiveness of the education program is also indicated by the career development of the alumni. A survey of Training Needs Assessment among Alumni and Professionals indicated that 98% of the graduates return to their home country and 87% is still active in the water sector ten years after graduation. In the framework of its 50th Anniversary UNESCO-IHE published a very interesting collection of case studies from its alumni under the title; "*Water Education for a Changing World: Messages from Alumni in the Field.*" The book is a rich source of information of the highly relevant role which alumni of the Institute play in the international and national water world. In spite of the survey and the book the Committee recommends that UNESCO-IHE reinforces in the near future a more systematic and more

frequent monitoring of the professional careers of its alumni. It will certainly help the Institute to fine-tune its educational program with the needs of the developing world and with the needs of students from those countries.

It is recommended that UNESCO-IHE:

- 1) gives continuing emphasis on the development of joint MSc programs with capable partner institutions in the developing world.**
- 2) strengthens the ties with Alumni by a systematic and regular monitoring of their professional careers**

Research

Research is seen as a very important activity of UNESCO-IHE. The institute has over the past years realized a significant increase in research activities, which take up about 20% of academic staff time. The Institutes aims to increase it to 30%. The numbers of PhD students grew from 50 to 68.

A recent report of the Internal Publication Committee of the institute indicates that there is a large variation in the quality of UNESCO-IHE publications; only a small group of the scientific staff is involved in the publication of the high quality papers. The internal report suggests organising a formal or informal evaluation of research according to the Standard Protocol that is generally accepted for research reviews of universities and research institutes. Apart from publications in high-impact peer-reviewed journals it is also relevant that UNESCO-IHE publishes in development-oriented outlets, and devises special programs or initiatives to ensure that returning graduates publish in their home countries too. And in local languages, as these have greater and more immediate policy impacts. Ways must be found to encourage such public engagement and to track their efficacy. UNESCO-IHE has a strong and meaningful research program.

The acceptance of the theses of UNESCO-IHE PhD students by several Dutch universities and the incorporation of a core staff group into the Research School SENSE indicates that the institute performs academic research. Stimulation of the number of high-impact peer reviewed publications will strengthen its position in *Academia*. Nevertheless, it also has to be careful not to overstress its academic role. It has the unique task to support the world wide development in the water sector through a mix of education, capacity building, networking and fundamental and applied research.

It is recommended that UNESCO-IHE:

- 3) continues to provide a good balance between education, capacity building, networking and research**
- 4) in the very near future an external assessment of the research output of UNESCO-IHE according to the Dutch Standard Protocol.**
- 5) increase the number of publications in high-impact peer reviewed journals;**

- 6) devises special programs or initiatives to ensure that returning graduates publish in their home countries too, and in local languages**

Capacity Building, Networks

UNESCO-IHE offers a wide range of expertise in support of institutional and organisational reform. It assists with training for needs assessments, human resource development, strategy development and decentralisation strategies. It provides support to strengthen the capacities of universities and training centres by developing curricula, upgrading educational and laboratory facilities, setting up research projects, providing staff development and re-training in science, administration and management, and it assists the marketing of academic products and services. These activities are excellent ways to realise several of the main objectives that are formulated in the Statutes of UNESCO-IHE. Main donors among Dutch public funding speak highly of the performance of the institute in capacity building.

The benefits of IHE as an UNESCO Institute

The main objective for UNESCO to invite IHE into the Organization was the world-wide reputation of the Institute in water sector education and capacity building. UNESCO was interested in an Institute to assist in coordinating the increasing number of UNESCO-affiliated Category II water centres¹, and reinforce its commitment to provide tangible contributions in one of its priority areas: water. There is potentially a very important lesson for international cooperation in the UNESCO-IHE mode. If the mode can be made successful, it will bring forth a new manner of international cooperation: instead of attempting to build new institutions from scratch, functioning local institutions that meet international standards, can be internationalized along the UNESCO-IHE line.

The benefits for UNESCO are that IHE was already up and running as a Dutch world class centre for water studies. The Netherlands saw an opportunity for the Institute to flourish as part of the UN system, especially in the context of the UN Decade of Education for Sustainable Development, the Millennium Development Goals, and also supporting one of its ODA priorities of providing practical know-how regarding integrated water resources management. It was felt by all involved that these objectives would be better addressed through a world-class education institute in the context of the United Nations and simultaneously improve the opportunities for the Institute to serve the world.

The Committee concludes that after four years of linkage to UNESCO the benefits to UNESCO-IHE are still rather small. The Committee has the impression that there is a lot of good will on both sides but not a concrete plan how to improve the cooperation. The Committee recommends that a joint task force of UNESCO and UNESCO-IHE formulates such a plan including clear milestones.

¹ UNESCO-IHE is a Category I institute, meaning that it is an integral part of UNESCO. Category II water centres are national/regional water centres that operate under the auspices of UNESCO.

Suggested elements for such a plan are that UNESCO-IHE :

- will be structurally and regularly involved in the strategic planning of UNESCO's water programmes, notably IHP and WWAP;
- will be hired (and paid for) more often by UNESCO as a consultant to perform services that fit into the framework of UNESCO's water plan and the objectives of the Institute, e.g. activities in the framework of the UN Decade on Education for Sustainable Development;
- cooperates (and not competes) with UNESCO in obtaining extra budgetary funding;
- gets a prominent task to bring the UNESCO water institutes of Category II to a higher level and develop a joint publication programme.

Member States have to participate in the UNESCO-IHE Partnership for Water Education by supporting elements of the educational program of the Institute

It is recommended:

- 7) that a joint task force formulates a plan for a better integration and linkage between UNESCO and UNESCO-IHE, including clear milestones.**

Coordination and Interaction

The UNESCO-IHE model, through which a UN agency joins forces with an existing, well respected and mature institute instead of starting a relevant facility from scratch, is considered promising for the UN-system as a whole. Nevertheless the present governing structure needs serious reconsideration.

UNESCO-IHE has boards: the Governing Board and the IHE Foundation Board. The Governing Board sets the policy and the nature of the activities of the Institute, approves the annual budget and Work Plan and examines the Annual Report. The Governing Board counts 13 members and meets once a year for one day. The Committee doubts whether the Board in this frequency and duration of meetings can ever have a strong leading role.

The Foundation Board is responsible to ensure continuity, including the safe-guarding of the employment of the Foundation staff and the financial viability of the Institute. The Foundation Board is seen as a supporting mechanism that has formal and legal responsibility for all decisions regarding Foundation staff and resources.

The Committee has serious doubts whether the present large Governing Board can ever have a strong leading role in UNESCO-IHE. A smaller Board that meets more frequently might be more effective in conveying the larger research and policy concerns to the Institute's management.

It is recommended that:

- 8) UNESCO, UNESCO-IHE, and the IHE-Foundation explore further innovative governance arrangements to fully capitalize on the potential synergy and opportunities inherent in their collaboration. It has to be decided whether the present**

governing structure will be continued or is regarded as a transition measure that has to shift to a form of regular governance of an international institute.

The mode of financing by OCW

Since the late nineties OCW has sought ways to further integrate the Institutes of International Education into the Dutch universities. Their minimal requirement is that the OCW contribution is routed via one of the Dutch universities. UNESCO HQ and of UNESCO-IHE are not in favour of such an arrangement, but if OCW persists they formulate the strict condition that such an arrangement can never include any governing role from the side of the university. The concerned university, the Technical University of Delft with whom there is a good academic cooperation, has expressed a willingness to serve as a conduit for the subsidy but does not want any involvement with the governance of the Institute nor any accountability to the Ministry of Education.'

It is recommended:

- 9) that OCW takes the initiative to negotiate with UNESCO, UNESCO-IHE and Delft University of Technology regarding the appropriate mode of financing the Institute.**

The Future of UNESCO-IHE

The Committee is certain that the content of the programmes does not form a constraint for the continuity of the Institute.

The Committee concludes in general, that the Dutch Government so far has not taken any positive financial consequence of the upgrading of IHE to an international top institute within UNESCO.

The Committee learned that the OCW subsidy to the Institutes for International Education (IO) is not based on a system of output financing like in all other parts of (higher) education in the Netherlands, but is purely based on historic arguments. The result is that the financing of the Institute does not contain any stimulus to increase performance, to attract more students or to obtain more research funding. On the contrary, more activities cause financial problems for the Institute, and hence reticence to change or increase activities to reflect the larger set of global issues that need addressing from UNESCO's perspectives.

UNESCO-IHE has formulated a proposal to raise the base funding of UNESCO-IHE by OCW with an amount of € 2.4 Million /year. The amount is needed for the following activities:

- the innovation of the educational programs and facilities.
- co-funding research of e.g. EU funds.
- an increased level of cooperation within UNESCO and the UN system including the UNESCO Centres and Chairs, and UNESCO's IHP (International Hydrology Program) and WWAP (World Water Assessment Programs) programs.

It has to be realised that even if the Ministry agrees with the proposal to increase the subsidy by € 2.4 Million /year to € 11.1 Million /year, it must be noted that the actual base costs of running the Institute are € 14.3 Million/year. This indicates that the Institute itself is willing to continue to play an active and entrepreneurial role in generating income to meet base costs. This is a very positive indication of the commitment of the entire staff to its stated objectives in education, research and capacity building. A comparative study between the three larger IO institutes was done by UNESCO-IHE in 2005 at the request of OCW. It showed that whereas the educational output of the three institutes does not differ more than 10% the OCW subsidy varies between € 22 Million and € 8.5 Million. The subsidy to UNESCO-IHE is the lowest of the three institutes, but it achieves to multiply the subsidy with a factor 2.5, in contrast to about 1.5 by the other two institutes.

It is recommended:

- 10) that the Dutch Government through the ministers of Education, Culture and Science (OCW) raises the annual subsidy to UNESCO-IHE with about € 2.5 million, indexed with inflation. Such a rise will help to give more balance to the division of subsidies between the different institutes for International Education and will give body to the partnership of the Dutch Government in an important international cooperation on water science and education.**
- 11) to study other options to improve the financial position of the Institute like:**
 - a) Improved financial arrangement with UNESCO with respect to consultancies and raising extra budgetary funding;**
 - b) Stimulation of the UNESCO-IHE Partnership for Water Education;**
 - c) Professionalize fundraising;**
 - d) Give permanent attention to the links with the Dutch Water sector;**
 - e) Improved links with the UN system in general and with UN entities involved in capacity building in particular;**
 - f) Exploration of additional forms of cooperation with Delft University of Technology e.g. in acquisition;**
 - g) Arrangements with universities about the transfer of a part of the output financing for PhD promotions.**
- 12) that both UNESCO and OCW assist UNESCO-IHE to find ways to improve its financial opportunities. It is not realistic to expect that the Institute can add important new perspectives to strategic objectives that are shared both by UNESCO and the Dutch Government without any extra funding.**
- 13) Taking into consideration the previous recommendations in this report, the Committee wholeheartedly recommends the Dutch Government to continue and increase the contribution to UNESCO-IHE for a further fixed term.**

2. EVALUATION BACKGROUND, FOCUS AND PURPOSE

2.1 Background of UNESCO-IHE

The process to establish the UNESCO-IHE Institute for Water Education was concluded by a decision of the 31st General Conference of UNESCO on November 2001. The Institute became operational in 2003. It continues the work that was started in 1957 when IHE offered a postgraduate diploma course in hydraulic engineering to practicing professionals from developing countries. Over the 50 years of its existence, the Institute has developed into an international education institute providing a host of postgraduate courses in many aspects of water sciences. It has also expanded its academic base to include disciplines such as social, economic, environmental and management sciences.

2.2 Mandate of UNESCO-IHE

The mandate of UNESCO-IHE is to:

- strengthen and mobilize the global educational and knowledge base for integrated water resources management, and
- contribute to meeting the water-related capacity-building needs of the developing countries and countries in transition.

2.3 Objectives of UNESCO-IHE

The main objectives of UNESCO-IHE are defined in the Statutes, as follows:

1. to serve as a standard-setting body for postgraduate water education programmes and continuing professional training, building on the experience of the Institute and of UNESCO's International Hydrological Programme and any other relevant experience;
2. to develop and deliver state-of-the-art education and research programmes, including postgraduate programmes and continuing professional training;
3. to create and reinforce networks of water sector educational institutions and organisations, and to act as an international forum for experts and professionals to exchange scientific, educational and technical information and knowledge in all aspects of integrated water management;
4. to contribute through research and education to the regular assessment of the water availability and use worldwide and to facilitate the exchange of information and knowledge on water availability and use;
5. to assist in studying educational problems in the field of integrated water management which emerge from programmes of assistance to developing countries;
6. to assist international organizations, and global initiatives in the coordination and execution on the respective water-related programmes;
7. to initiate and facilitate international policy dialogues on scientific and technical grounds on issues concerning water management.

These objectives resemble for the main part the core activities of the IHE before it was connected to UNESCO. The contribution allocation document of the Ministry of Education, Culture and Science in 1995 specifies as tasks for the institute: to develop academic programmes for students from developing countries, to perform scientific research, consultancies and the stimulation of international cooperation.

2.4 The Evaluation

The Statutes state that ‘After four years the Government of the Netherlands, in consultation with the Director-General of UNESCO, shall request an external evaluation by an independent evaluation body, in order to determine whether its contribution should continue for a further fixed-term period.’ In view of a strongly changing environment, it was decided to broaden the evaluation to include the effects of the integration with UNESCO, the positioning of the Institute in the Dutch Higher Education system, the level of the contribution to the Institute by the Dutch Ministry of Education, Culture and Science (OCW) and the relevance and impact of UNESCO-IHE’s programmes and services to key stakeholders.

2.5 Focus of External Evaluation

The external evaluation committee is asked to advise whether the Government of the Netherlands should continue its contribution for a further fixed-term period. Besides the evaluation will have to include:

- the effects of the integration with UNESCO;
- the positioning of the Institute in the Dutch Higher Education system,
- the level of the contribution to the Institute by OCW, and
- the relevance and impact of UNESCO-IHE’s programmes and services to key stakeholders.

2.6 The Primary Questions

The purpose of this evaluation is to assess the functioning of UNESCO-IHE in terms of relevance, impacts, efficiency, effectiveness, and sustainability/finding mechanisms in relation to the activities and results of the Institute, UNESCO’s mandate, and the contribution from the Netherlands Ministry of Education, Culture and Science (OCW).

In particular, the evaluation will seek to establish on the basis of desk research of the available documents (see Annex I) and the interviews (see Annex II) answers to the following primary questions:

- a) Is the quality of education and research adequate in relation to the norms that are applied in the Dutch tertiary education system?
- b) Is the performance of the Institute adequate in terms of fulfilling the goals and functions defined in (i) the original OCW contribution allocation document (core Activities), and (ii) the Statutes of the Institute (man-dated functions)?

- c) Has the new setting as a category I Institute of UNESCO been beneficial to (1) outputs and performance of the Institute, to (2) UNESCO's efforts as a specialized UN agency and to its Member States, (3) the larger UN system, to (4) the Government of the Netherlands and (5) other stake-holders? Has it affected UNESCO-IHE's efficiency and effectiveness vis-à-vis the implementation of its mission?
- d) What is the quality of coordination and interaction between UNESCO's Headquarters, UNESCO-IHE, Field Offices and category II Centres with regard to planning and implementation of programmes, including the action taken to avoid possible duplication and overlap?
- e) What are the possible consequences for the status of the Institute in relation to the measures proposed by OCW to adapt the mode of financing of the Institute? Do the operations and outputs of UNESCO-IHE justify the continuation of OCW contribution after 2007?
- f) Are there perceived constraints for the medium-term and longer viability of the Institute with regard to:
 - the relevance of the programmes (relevant for the continuity);
 - the financing of the programmes (relevant for the level of contribution) and specifically with regard to the level of the OCW contribution after 2007;
 - the institutional setting (relevant for the routing of the contribution);
 - further integration into the UNESCO and UN systems?

3. EVALUATION METHODOLOGY

3.1 External evaluation committee

This evaluation has been carried out by an independent team of two external experts:

- Professor dr. Cees M. Karssen, Team Leader, Emeritus Professor Plant Physiology and Former Rector Magnificus Wageningen University & Research Centre, The Netherlands. He has extensive experience with national and international programme evaluation, organizational development, and knowledge of the structure and the financing of Higher Education in the Netherlands;
- Mr Dipak Gyawali, *Pragya* (Academician) of the Nepal Academy of Science and Technology (NAST) and former minister of water resources. He has extensive experience in the areas of water research and development, and chaired the EU-INCO review of its international water research between 1994 and 2006.

Charged by the Dutch Ministry of Education, Culture and Science (OCW), the external experts were supported by dr. André Nijsen, Director of Panteia, a holding company with four policy research bureaus of which one is EIM Business & Policy Research.

3.2 Scope of the Evaluation

The evaluation covers the period from July 2003 to March 2007. References to earlier periods are made only if necessary, depending on emerging issues during the course of the evaluation. The evaluation started on April 12th 2007, with a kick-off meeting at the Ministry of Education, Culture and Science (OCW). After that kick-off meeting there was a first meeting with Mr. Maarten Blokland, Deputy Director of UNESCO-IHE at April 16th. The focus of that first meeting was on the relevant documents to be studied, among which was the Self Evaluation Report (#24 in Annex I, which lists all available documents), and the relevant stakeholders to be interviewed (see Annex II for a list of all interviewees).

The next stage of the external evaluation included:

- An assessment and analysis of the Self Evaluation Report;
- A desk review of all the relevant and available documents furnished by UNESCO-IHE, OCW and UNESCO (see Annex I for all available documents).

Based on this desk research, the external evaluators made up an evaluation plan: necessary additional information, an overview of relevant stakeholders organizations and a list of relevant persons for the face-to-face interviews. Next, a programme for all the face-to-face interviews was set up on the basis of this list.

During the period May 23 until June 1, 28 face-to-face interviews were held with 43 different persons, located in the Netherlands (Delft and The Hague) and France (Paris). In the Netherlands visits were paid to UNESCO-IHE, the Ministry of Education, Culture and Science (OCW), the Ministry of Foreign Affairs, the Ministry of Transport, Public Works and Water Management (V&W), the Technical University Delft (TUD), NUFFIC (Netherlands Organization for International Co-operation in Higher Education), and the Netherlands Water Partnership (NWP). In France visits were paid to UNESCO: Deputy Director-General, Internal Oversight Service (IOS), Office of International Standards and Legal Affairs (LA), Bureau of Strategic Planning, Natural Science Sector (SC), Sector for External Relations and Cooperation (ERC), Sector for Administration (ADM). Discussions were also held with the Dutch Ambassador to UNESCO.

The limited time schedule of the evaluation committee did not allow for a wider geographical coverage of interviews and discussions, e.g. UNESCO-IHE alumni in their current career positions in various water-related organizations around the world.

3.3 Process of the Evaluation

After finishing of the draft external evaluation, the team leader submitted the draft evaluation report to the Ministry OCW and UNESCO-IOS (Internal Oversight Service). After acceptance of the draft report, the Ministry OCW and UNESCO-IOS have shared the adapted version of the draft report to UNESCO-IHE and UNESCO-SC for factual comments. Afterwards, the comments from the Ministry OCW, UNESCO-IHE, UNESCO-SC, and UNESCO-IOS were submitted to the team leader of the external evaluators with copies to the Ministry OCW, UNESCO-IHE, UNESCO-SC, and UNESCO-IOS. Finally, the Ministry OCW submitted all comments collected to the team leader of the external evaluators to prepare the final report.

4. QUALITY, PERFORMANCE AND OUTPUT

In this section the Committee formulates the answer to the first two primary questions:

- a) *Is the quality of education and research adequate in relation to the norms that are applied in the Dutch tertiary education system?*
- b) *Is the performance of the Institute adequate in terms of fulfilling the goals and functions defined in (i) the original OCW contribution allocation document (core Activities), and (ii) the Statutes of the Institute (mandated functions)?*

4.1 Quality of Education and Research

The leading question of this section is:

- a) *Is the quality of education and research adequate in relation to the norms that are applied in the Dutch tertiary education system?*

4.1.1 Strategy of UNESCO-IHE

Findings

IHE has traditionally been a civil engineering institute of a high calibre, with worldwide renown. However, given the worldwide environmental concern and the developmental debates over large dams and water structures, there is a growing need for introspection within the civil engineering community. This introspection has required of civil engineers that they go beyond their conventional discipline into social, legal and ecological areas. The amalgamation with UNESCO has fed an element of urgency to this concern: UNESCO, with its global mandate to address issues of water within the UN system, cannot claim aloofness from what-ever water problems its 192 member countries face. And those problems are of-ten in such realms as conflict resolution, law, economics, public finance and ecology. ‘These subjects have over the course of the last fifteen years been mainstreamed in the education and research activities of UNESCO-IHE. Indeed, in the survey conducted with the alumni of IHE who are in senior positions around the world (Annex I - #36), several high-level responses conform the need for IHE to address these subjects, which are traditionally not done in Delft.

Conclusions

The Committee observed that the Institute has been addressing these new strategic choices in their research efforts over the last years, but integration with UNESCO's IHP might require that more of such subjects be introduced, and sooner. It defines three priority research themes: (1) *Water Security*, (2) *Environmental Integrity* and (3) *Urbanization* and in addition two cross-cutting themes: (4) *Information and Communication Systems* and (5) *Water Governance*.

4.1.2 Education Findings

Education is the most important activity of the institute with around 200 MSc students per year studying at Delft, which takes up about 50% of the academic staff time. The educational programs are based on the expressed demand for the programs, the positive evaluations by students, and the positive outcome of the recent accreditation process.

At present, UNESCO-IHE's educational offerings consist of:

- Four MSc programs with 14 specialisations
- a PhD program
- regular short courses
- tailor-made courses
- online courses

During the period 2003-2007 major developments were:

- The modularisation of the Masters' programs aimed at increasing their flexibility. Efficiency was gained by creating a framework in which modules could also be offered as short courses, and by allowing modules to be shared by different specializations. The modular structure and the adoption of the European Credit Transfer System (ECTS) paved the way to share programmes with partner institutions and to diversify the educational portfolio with regular and tailor-made short courses and distance learning short courses. These latter courses attract a growing attendance.
- Some joint specialisations are offered with partner institutions in Austria and China and more of such initiatives are in various stages of development.
- All 12 month Master of Engineering programs were abolished. The current program concentrates fully on an 18-month MSc program which includes a six month research period. This transformation stimulated the international recognition of the institute's degree system.
- The four MSc programs were reviewed by an Accreditation Committee of QANU (Quality Assurance Netherlands Universities). Based on the report of that Committee the programs were accredited as master of Science by the Dutch Flemish Accreditation Organisation (NVAO) in 2007.
- UNESCO-IHE developed its first online course in 2004, mostly together with PoWER partners (see section 4.3.). Since then ten online courses were developed.
- Stimulated and partly forced by the report of the Accreditation Committee, UNESCO-IHE reinforced a didactical innovation process directed to strengthening of problem-based and interdisciplinary learning and to better follow the new strategic choices in water sciences.

It is important that UNESCO-IHE does not restrict its educational activities any longer to the traditional approach of education at Delft for students from developing countries but gradually accepts in addition to degree programs at Delft, also other educational approaches like forms of distance learning and joint programs with partner institutions elsewhere. The Committee recommends that the Institute further stimulate these new trends. It will certainly widen the opportunities for students to benefit from the educational experience of the Institute.

Conclusions

The Committee concludes that UNESCO-IHE totally meet the norms that are applied in Dutch higher education, and the accreditation by NVAO signifies the official acceptance of the programs in the Dutch higher education system. Since NVAO follows common international standards, the accreditation also indicate that education at UNESCO-IHE meets the international standard of degree programs. UNESCO-IHE is the only institution in the UN system with the right to confer accredited MSc degrees in water and environment.

It is sign of good management that the institute immediately responded to the critical elements in the report of the Accreditation Committee and started an innovation process of certain aspects of the education program. The Committee appreciates that the programmes clearly shift to integrated water management and attempts to follow the priorities set for research (see 4.1.1). Likewise it appreciates the choices for new innovative forms to deliver the programs and to improve the inclusion of research training.

It is expected that in the future, the emphasis on MSc education in Delft will further shift towards joint MSc programs with capable partner institutions in the developing world. Such joint programs are attractive because they can be offered at lower costs and might open new markets. This trend will also further ensure the development relevance of UNESCO-IHE's programs. Such relevance is also stimulated by the choice of the subjects of the Master theses, which are often realised in a sandwich construction with the home institution of the student.

The quality and effectiveness of the education program is also indicated by the career development of the alumni: 98% of the graduates return to their home country and 87% is still active in the water sector ten years after graduation. From a survey of Training Needs Assessment among Alumni and Professionals of UNESCO-IHE and other PoWER Partners, it appeared among others that:

- they represent different employment positions, especially management (27.15), consulting (24.2%), research and laboratory work (19.3%, and policy making (9.2%);
- studying at UNESCO-IHE has substantial improvements to the professional and personal development of its surveyed Alumni. Results show that about 89.6% and 78.6% of the respondents highly weighted the improvement occurred to their professional performance and career growth, respectively;
- These results also show that studying at UNESCO-IHE improved the personal income of more than 90% of the surveyed Alumni;
- respondents considered any initiative to strengthen ties with the Alumni community as highly appreciated (see document nr. 42 # Annex I).

In the framework of its 50th Anniversary UNESCO-IHE published a very interesting collection of case studies from its alumni under the title; *“Water Education for a Changing World: Messages from Alumni in the Field.”*. The book is a rich source of information of the highly relevant role which alumni of the Institute play in the international and national water world. It also gives numerous examples how the educational approach of UNESCO-IHE is adapted by the alumni in their own national institutes. In spite of the important survey and the highly interesting book the Committee recommends that UNESCO-IHE starts in the near future a more systematic and more frequent monitoring of the professional careers of its alumni. It will certainly help the Institute to fine tune its educational program with the needs of the developing world and with the needs of students from those countries.

Recommendations

The Committee recommends that UNESCO-IHE gives continuing emphasis on the development of joint MSc programs with capable partner institutions in the developing world.

The Committee also recommends strengthening the ties with Alumni by regular and frequent monitoring their professional careers on a yearly basis.

4.1.3 Research Findings

One of the strategic objectives of UNESCO-IHE is to increase the role of research; it is the intention to bring UNESCO-IHE among the top tier postgraduate water-related institutions that serve the future water leaders from the developing world; and, to work in partnership with key academic centres. Research is seen as a very important activity of UNESCO-IHE. The institute has over the past years realized a significant increase in research activities, which take up about 20% of academic staff time. The Institutes aims to increase it to 30%. The numbers of PhD students grew from 50 to 68 and the number of PhD graduations rose from 3 in 2002 to 11 in 2006; the number of scientific publications nearly doubled from 129 in 2002 to 212 in 2006. UNESCO-IHE now participates in 27 research contracts, and leads one of the largest EU research contracts, SWITCH (Sustainable Water Management Improves Tomorrow’s Cities Health). The Institute does not or only partially benefit from PhD graduation income from the Ministry like the Dutch Universities and ISS. This represents a substantial financial loss.

The research output of UNESCO-IHE has not been subject to a comparative review. A recent report of the Internal Publication Committee of the institute describes a first, internal attempt to measure research quality by means of the impact factors of the journals in which the research staff publishes their papers and of the citation scores of those papers. The outcomes indicate that there is a large variation in the quality of UNESCO-IHE publications. About 80% of the papers are never cited. Only a small group of the scientific staff is involved in the publication of the high quality papers. The internal report suggests organising a formal or informal evaluation of research according to the Standard Protocol that is generally accepted in The Netherlands for research reviews of universities and research institutes. Unfortunately, the internal report does not make a clear distinction between scientific papers and professional, client oriented publications. For the latter category citations are less relevant.

Apart from publications in high impact peer-reviewed journals it is also relevant that UNESCO-IHE devises special programs or initiatives to ensure that returning graduates publish in their home countries too. And in local languages, as these have greater and more immediate policy impacts. Ways must be found to encourage such public engagement and to track their efficacy.

The Dutch Research School for Socio-Economic and Natural Sciences of the Environment (SENSE) recently accepted members of all core groups of UNESCO-IHE as member or associated member. SENSE is accredited by the Royal Netherlands Academy for Arts and Sciences. It indicates that these staff members meet the conditions for membership of a research school which is 2.5 (full professors) to 1.5 (researcher) refereed publications plus PhD theses. It is certainly a proof that the institute houses research at academic level.

A similar conclusion can be drawn from the fact that all full professors of UNESCO-IHE have an additional so-called 'zero' appointment at one of three Dutch Universities (Delft University for Technology, Free University Amsterdam or Wageningen University), indicating that the professors at the institute all meet the university quality standard. This appointment gives them the *jus promovendi*, a right that is by law limited to universities only. All PhD students of the institute defend their thesis in a joint examination of one of these universities and the institute.

The Institute observed recently a sharp increase in the numbers of PhD applications. It may indicate that that students in developing countries receive their BA and Master degrees more often in their home countries, but still need PhD education still. It is certainly also a sign of appreciation for the quality of the institute.

Conclusions

UNESCO-IHE has a strong and meaningful research program. The acceptance of its PhD theses by several Dutch universities and the incorporation of a core staff group into the Research School SENSE indicates that its research is held in high esteem by Dutch universities and other partners. Research is seen as a very important activity of UNESCO-IHE. The institute has over the past years realized a significant increase in research activities, which take up about 20% of academic staff time. The Institute aims to increase it to 30%. The numbers of PhD students grew from 50 to 68. However, it is a very serious omission that the research output of the institute has never been subject of a careful international benchmarking by peers. Without such a research assessment it is too early to formulate one of its objectives as “maintaining academic excellence” (Document 9 in Annex 1). Excellence is something to be constantly striven for in a dynamically changing world of challenges, not a laurel to be resting on. In that respect it is important that it stimulates a rise in the number of high impact peer reviewed publications.

UNESCO-IHE certainly has an important position in *Academia*. Nevertheless, it has to be careful not to overstress its academic role. It is not primarily an academic institution; it is also not just another research institute. It has the unique task to support the world wide development in the water sector through a mix of education, capacity building, networking and research.

Recommendations

The Committee recommends that UNESCO-IHE continues to provide a good balance between education, capacity building, networking and research. The Committee also recommends UNESCO-IHE to organise in the very near future an external assessment of the research output of UNESCO-IHE according to the Dutch Standard Protocol.

Next the Committee advises UNESCO-IHE to increase the number of publications in high impact peer reviewed journals.

Finally, the Committee advises UNESCO-IHE to devise special programs or initiatives to ensure that returning graduates publish in their home countries too, and in local languages.

4.2 Performance and Output

The leading question of this section is:

- b) Is the performance of the Institute adequate in terms of fulfilling the goals and functions defined in (i) the original OCW contribution allocation document (core Activities), and (ii) the Statutes of the Institute (mandated functions)?*

The different goals and functions are listed in section 2.3. The present section concentrates on the functions outside the direct areas of education and research

4.2.1 Capacity Building, Partnerships and Networks, Standard Setting

Findings

UNESCO-IHE offers a wide range of activities and expertise in support of institutional and organisational reform. It assists with training for needs assessments, human resource development, strategy development and decentralisation strategies. It provides support to strengthen the capacities of universities and training centres by developing curricula, upgrading educational and laboratory facilities, setting up research projects, providing staff development and retraining in science, administration and management, and it assists the marketing of academic products and services. Sometimes projects will consist of a mix of capacity building, research and training and consultancy type services. Mostly the projects are concentrated on a certain activity. The Ministry for Development Cooperation is currently developing a new relationship with the Institute, based on confidence, unity of purpose and objectives, and the high quality of the Institute's outputs. This 'programmatic cooperation will be for a period of five years starting in 2008 and will replace a multitude of projects by a programme of coherent and mutually reinforcing activities.

Capacity building has become a major activity over the last 15 years. It is the second most important activity of UNESCO-IHE, and takes up about 30% of academic staff time. At any one time more than one hundred capacity building projects are active. Capacity building increased by about 15% over the period 2003-2007.

Networks, which give added value to many of the activities of UNESCO-IHE, evaluates as follows. It is capacity building at a larger scale and in cooperation with partner institutions. An important example of a successful network is the *Partnership for Water and Research (PoWER)* (established in 2003). It links 17 educational institutions in the field of water. The Partnership will provide demand responsive postgraduate education, research and capacity building services to individuals and organisations throughout the developing world. UNESCO-IHE maintains close working relationships with regional and local networks that it has helped to set up such as WaterNet (Southern and Eastern African Region), the Nile Basin Capacity Building Network, and the CK-Net (Indonesia).

Partners of UNESCO-IHE are not only found in these networks but also in the European and Dutch Research and Education Community and in other areas of the Western world.

Standard setting has two aspects: (1) ensuring quality of its own programs and (2) imposing its own quality standards on degree programs offered in cooperation with partners. It is a rather recently formulated objective. UNESCO-IHE is actively developing this task. It has established an internal quality assurance system. Also, capacity buildings projects and joint educational programs with partner institutions include the implementation of quality assurance. Standard setting is an important component of institutional capacity building projects and joint educational programs. The function will increase with the growing number of joined educational programs.

The Statutes of UNESCO-IHE formulates the objective policy dialogue as follows “*to initiate and facilitate international policy dialogues in scientific and technical grounds on issues concerning water management*”. It means taking the lead in global debates on the overall water sector and creating opportunities for stakeholders to exchange knowledge, experience, ideas, and opinions about issues related to water management challenges.

To fulfil this task UNESCO-IHE has organized and provided inputs in International conferences. The Institute organized four international conferences on capacity building for the water sector, the last one in June 2007. Also, policy issues are debated in UNESCO-IHE educational programs and specialized short courses. Essential is the training of current midlevel professionals and the next generation of water managers so that they are well versed in the pro's and con's of ongoing global debates. UNESCO-IHE has made a modest contribution to policy development, in particular in the area of Integrated Water Management. The realisation of this task is stimulated by the good connections of the Institute in the World Water family and the hosting of many networks. It played a role in the UNESCO flagship output, the World Water Development Report, and will edit the next edition of that document.

Conclusions

The Committee is impressed by the large volume and the diversity of these activities. They are excellent ways to realise several of the main objectives that are formulated in the Statutes of UNESCO-IHE. The framework of the present evaluation did not permit a detailed assessment of these different tasks; but the Committee is convinced that the separate donors which fund such activities perform adequate quality checks. Main donors among Dutch public funding speak highly of the performance of the institute in capacity building.

5. IHE AS UNESCO INSTITUTE

The leading questions for the evaluation of the role of IHE as an UNESCO institute are:

- c) *“Has the new setting as a category I Institute of UNESCO been beneficial to (1) outputs and performance of the Institute, to (2) UNESCO’s efforts as a specialized UN agency and to its Member States, (3) the larger UN system, to (4) the Government of the Netherlands and (5) other stakeholders. Has it affected UNESCO-IHE’s efficiency and effectiveness vis-à-vis the implementation of its mission”?*
- d) *“What is the quality of coordination and interaction between UNESCO’s Headquarters, UNESCO-IHE, Field Offices and category II Centres with regard to planning and implementation of programmes, including the action taken to avoid possible duplication and overlap”?*

5.1 General

The leading question of this section is:

- c) *“Has the new setting as a category I Institute of UNESCO been beneficial to (1) outputs and performance of the Institute, to (2) UNESCO’s efforts as a specialized UN agency and to its Member States, (3) the larger UN system, to (4) the Government of the Netherlands and (5) other stakeholders. Has it affected UNESCO-IHE’s efficiency and effectiveness vis-à-vis the implementation of its mission”?*

In 2001, UNESCO member states decided to make water and associated ecosystems one of its ‘principle priorities’. Since then UNESCO has rapidly build up its water programme and increased funding in this area.

UNESCO’s interest in water is built on 3 pillars:

- The International Hydrological Programme (IHP), recently complemented by some 12 international and regional centres (UNESCO category II institutes)
- UNESCO-IHE
- the World Water Assessment Programme (WWAP), a joint initiative lead by UNESCO of 24 bodies dealing with water within the UN system.

IHE became in 2003 a Category I institute of UNESCO. The change was established in an Agreement signed by the Director General UNESCO and the Minister of Education, Culture and Science of the Netherlands. The institute is entirely extra budgetary, which means that it does not receive any money from the Regular Programme of UNESCO. As such it represents a new and unique model within UNESCO.

5.2 Benefits

Findings

There is potentially a very important lesson for international cooperation in the UNESCO-IHE model. With the onward march of globalization in its wider social

sense, international centres have to be set up in several parts of the world on a range of subjects.

The main objective for UNESCO to invite IHE into the Organization was its existing worldwide reputation in water sector education and capacity building. UNESCO was interested in an Institute to assist in coordinating the increasing number of UNESCO-affiliated Category II water centres. This situation is unlike other UNESCO Class I institutes that had been set up, as it were, from scratch. UNESCO has inherited, through the Dutch government, some forty five years of built institutional capacity, the global network of Delft alumni around the world (now in fairly high positions in their respective countries) as well as a connection to the network of other Delft technical training and research capacity such as in the Delft University for Technology (TUD). This bringing of IHE into the UNESCO fold has allowed UNESCO to "hit the ground running", allowing it to meet immediately some of its capacity building mandate as well as establishing a global policy network platform, without waiting long years building internal capacity.

The Dutch government also benefits in "gifting" IHE to UNESCO. The Netherlands saw an opportunity for the Institute to flourish as part of the UN system, especially in the context of the UN Decade of Education for Sustainable Development, the Millennium Development Goals, and also supporting one of its ODA priorities of providing practical know how regarding integrated water resources management. It was felt by all involved that these objectives would be better addressed through a world class education institute in the context of the United Nations and simultaneously improve the opportunities for the Institute to serve the world community. Water has become a high profile subject globally, due to its importance for public health, environmental security and economic growth, as well as from climate change considerations. Many countries in both the South and the North have set up, are setting up, or are thinking of establishing some type of "water resource centre" for research and training. Each one has an aspiration of being a "world class" centre. In this competitive atmosphere, the legitimating international link through UNESCO gives the Delft family a better chance to be *the* international water centre. However, this opportunity – and its actualization – also comes with commensurate obligations, both practical and moral, for the Dutch authorities.

Based on the large number of interviews and the desk studies, the general conclusion of the Committee is that in spite of the high aspirations formulated above both by UNESCO and the Dutch Government, after 4 years of linkage to UNESCO the benefits to UNESCO-IHE are still rather small. In particular because the aspirations were so far not translated in any substantial financial paragraph (see chapters 6 and 7).

Most respondents praised in particular the enhanced status, the prestigious position in the "water world". Students have the positive feeling that the Institute is now part of all UNESCO members states and therefore also of them. UNESCO-IHE is an international institute and not biased by purely Dutch interests. Those doing research feel that they have better access through many policy and other doors around the world because of being part of UNESCO rather than a purely Dutch institute.

However, the observer who is familiar with the "old" IHE does not see marked differences in output and performance. In a lot of aspects "it is business as usual". Recent changes in education (accreditation, didactical innovation, fellowship program) and research (quality improvement of

publications) are mainly inspired by changes in the Dutch University system and not by UNESCO. This observation is not remarkable because UNESCO-IHE is still financed for the main part by Dutch governmental agencies and therefore has to follow Dutch rules.

Conclusions

If the Dutch-UNESCO cooperation on IHE can be made successful, it will bring forth a new manner of international cooperation: instead of attempting to build new institutions from scratch, functioning local institutions that meet international standards/aspirations, whether in the North or the South, can be internationalized along the UNESCO-IHE line. UNESCO and other international organizations will be much more effective and will have to spend so much less in terms of institution-building in so setting up international affiliates.

With respect to the benefits to the output and performance of the Institute it has to be realized that the change from IHE to UNESCO-IHE did not include a direct need to rebuild the Institute. UNESCO incorporated IHE as part of its organisation because it highly appreciated what IHE had been doing during the past 45 years. Most objectives that are defined in the Statutes (see section 2.3) were already pursued successfully for a long period of time. Member States profited already from the expertise that IHE alumni added to their national knowledge base and from the networks of the Institute. The objectives “to serve as a standard setting body” and “to initiate and facilitate international policy dialogues” were new additions.

It would therefore be unfair to expect too many dramatic changes in such a short time frame, more so because there were no financial benefits attached to the transformation. UNESCO got IHE for free, and not much indication was seen of it having pushed for such changes through its representatives in the Board. Insiders in the UNESCO systems told the Committee that the slow start is not surprising; it simply takes considerable time to get influence in the UNESCO system. Moreover, a certain degree of wariness on both sides had to be overcome and transformed into trust in exploring new options for the future of the Institute.

In spite of all these mitigating circumstances the analysis of the present state of the cooperation is rather worrying. The Committee has the impression that there is a lot of good will on both sides but not a concrete plan how to improve the cooperation. The Committee recommends that a joint task force of UNESCO and UNESCO-IHE formulates such a plan including clear milestones.²

Suggested elements for such a plan are:

UNESCO-IHE :

- will be structurally and regularly involved in the strategic planning of UNESCO’s water programmes, notably IHP and WWAP;
- will be hired (and paid for) more often by UNESCO as a consultant to perform services that fit into the framework of UNESCO’s water plan and the objectives of the Institute,

² During the preparation of the report the Committee was informed that a high level task force has been established by the DG UNESCO to draft a strategy for the water-related category I and II centres, and that a first draft document was issued. The Committee has not seen any documentation of this task force, but it trusts that it will consider our recommendations very seriously.

- e.g. activities in the framework of the UN Decade on Education for Sustainable Development;
- cooperates (and not competes) with UNESCO in obtaining extra budgetary funding;
- gets a prominent task to bring the UNESCO water institutes of category 2 to a higher level and develop a joint publication programme Member States participate in the UNESCO-IHE Partnership for Water Education by supporting elements of the educational program of the Institute

The Committee expects that it will cost a lot of effort and good will to further materialise the added value of the link between UNESCO and IHE, but it is convinced that it will be successful.

Recommendations

The committee recommends that a high ranking task force designs more concrete forms for the future linkage between UNESCO and UNESCO-IHE

5.3 Coordination and Interaction

The leading question of this section is:

d) “What is the quality of coordination and interaction between UNESCO’s Headquarters, UNESCO-IHE, Field Offices and category II Centres with regard to planning and implementation of programmes, including the action taken to avoid possible duplication and overlap”?

5.3.1 General

Before UNESCO-IHE can become a model of international cooperation it has some way to go. There are currently several teething problems that need to be addressed, of which that related to the governing structure requires considerable attention from higher authorities.

5.3.2 The Governing structure of UNESCO-IHE

Findings

UNESCO-IHE has a double-headed management in the form of two boards -- the Governing Board and the IHE Foundation Board. The Governance system was designed in such a way that the Institute would remain a high degree of functional autonomy which was seen necessary to operate in a competitive environment. Nevertheless, there is no doubt with anybody involved that the Institute is an integral part of the UNESCO organisation. The Director General of UNESCO is recognised as the highest authority.

The Institute is governed by the Governing Board which has 13 members, six selected from the Intergovernmental Council of the IHP to represent each of UNESCO electoral groups, three of them are recommended by the Dutch Government and others by the Director General, including one to represent IHE alumni. The Board sets the policy and the nature of the activities of the

Institute, approves the annual budget and Work Plan and examines the Annual Report. The Board meets once a year for one day. An Executive Committee of three members meets also once a year.

Next to the Governing Board also the IHE-Delft Foundation exists. During the lengthy negotiations that preceded amalgamation with UNESCO, this double board structure was seen as the best option during the transition period. The Foundation is responsible to ensure continuity, including the safeguarding of the employment of the Foundation staff and the financial viability of the Institute. The Foundation Board is seen as a supporting mechanism that has formal and legal responsibility for all decisions regarding Foundation staff and resources. It is a Board of three persons: the Chair is independent; the other two members are also members of the Governing Board of the Institute. This structure strongly reduces financial risks for UNESCO.

Only the Director and deputy Director are employed by UNESCO, all other staff members are employed by the Foundation and placed at the disposal of the Institute "on fulltime loan" from the Foundation. Each staff member has signed a statement that he/she will be subject to the authority of the Director of the Institute. This structure was chosen in 2003 because it was far too expensive to appoint all staff as UNESCO staff. The staff remained in this way subject to Dutch labour legislation and pension system. It was a condition for the acceptance of the new structure by the Labour Unions.

Conclusions

In general the Committee concludes that the UNESCO-IHE model, through which a UN agency joins forces with an existing, well respected and mature institute instead of starting a relevant facility from scratch, is considered promising for the UN system as a whole. Issues of governance will always be a challenge in such collaboration. Nevertheless the present governing structure needs serious reconsideration.

The Committee has serious doubts whether the present large Governing Board can ever have a strong leading role in UNESCO-IHE. A smaller Board that meets more frequently might be more effective in conveying the larger research and policy concerns to the Institute's management. A strongly involved and well informed Board is an essential counterpart for every Directorate of an institute.

This double governance structure is certainly an anomaly if seen in the normal management sense; however, it does seem that it was the "optimum" solution in terms of all the constraints -- political, legal and institutional -- at the time this form of cooperation was initiated.

Dutch and UNESCO authorities now face a dilemma. They can either consider the present structure as just an effective transition measure or decide to accept it as a permanent arrangement. If they choose for the first option they have to consider how long this transition should be, what is the rough outline of what lies at the end of that transition, and what are the steps to reach that end goal. If they decide to continue the present governing structure they have to face a number of different interpretations of responsibilities that has occurred both at UNESCO HQ and at UNESCO-IHE. The Committee noticed during the different interviews that in particular, elements of risk management, auditing, status of staff and reporting cause confusion and irritation

from both sides.(Document 35 in Annex 1). These confusions are for the main part due to different interpretations of the tension that exists between being “an integral part of UNESCO” and “having an extra-budgetary, independent financial status”. It is up to the higher authorities of both institutions to clarify such responsibilities.

Recommendations

UNESCO, UNESCO-IHE, and the IHE-Foundation will have to explore further innovative governance arrangements to fully capitalize on the potential synergy and opportunities inherent in their collaboration. It has to be decided whether the present governing structure will be continued or is regarded as a transition measure that has to shift to a form of regular governance of an international institute. The committee sees arguments for both structures. However, it is most essential that both involved parties, UNESCO-IHE and UNESCO, agree on the final governing structure and are willing to fully comply with the consequences.

6. FINANCIAL RELATIONS WITH DUTCH MINISTRIES

Committee was asked to advice on the following question:

- e) *What are the possible consequences for the status of the Institute in relation to the measures proposed by OCW to adapt the mode of financing of the Institute?*

6.1 General

UNESCO-IHE is for 75 % of its funding dependent on Dutch public money. The responsibilities are spread over different ministries:

1. The Ministry of Education, Culture and Research (OCW) subsidizes the Institute for 35% of its annual budget;
2. The Ministry for Development Cooperation finances activities of the Institute representing about 40% of its annual budget. This includes fellowships through the Netherlands Fellowship Program (NFP) and a large part of the capacity building projects;
3. The Ministry of Transport, Public Works and Water Management finances joint research projects and partial fellowships for specific countries.

6.2 Subsidy and additional funding

Findings

Apart from being an integral part of UNESCO, the Institute is also an institute for higher education in the Netherlands, being one of the five degree issuing International Education (IO) institutes. These institutes were established about 50 years ago to provide postgraduate education for professionals from developing countries and countries in transition. According to Dutch law these IO institutes are not universities, and one of the consequences is that they do not have the right to issue PhD degrees. The degrees have to be granted through the lawful right of a

university. Since the late nineties OCW has sought ways to further integrate the institutes into the universities. Their minimal requirement is that the OCW contribution is routed via one of the Dutch universities, but further integration with a parent university being constantly pushed for. IHE was so far left out this scheme because it got linked to UNESCO.

The Committee learned from the interviews with the deputy director Higher Education of OCW that the minimal request of the ministry is that UNESCO-IHE, in order to obey the law, choose a university that can function as a post box through which the OCW subsidy can be transferred to the Institute. However, a strict condition from the side of UNESCO HQ and of UNESCO-IHE is that, although they do not care how the Dutch route their subsidy to the Institute, such an arrangement can never include any governing role from the side of the university. The Committee learned, during an interview with the rector magnificus of Delft University of Technology (TUD), that the University is strongly interested in more cooperation with UNESCO-IHE, but opposes a governing role as a kind of “parenting university”.

The most important sponsor of fellowships is the Dutch Ministry of Foreign Affairs through the Netherlands Fellowship Program (NFP). The program was for many years a sustainable source of a fixed number of fellowships (129 for IHE). In 2003 the NFP changed, and unfortunately this happened immediately after IHE was handed over to UNESCO. It became demand driven, the number of applicants determined the final number of fellowships. In addition competition between a much larger number of different courses of Dutch universities was introduced. The International Education institutes lost their preferred position. As a result UNESCO-IHE lost half of its fellowships. This has led to misinterpretations about Dutch commitments and its living up to its side of the agreement following IHE's handover to UNESCO.

The Ministry is also an important sponsor of capacity building projects and networks. Consultations are going on about a “programmatic cooperation” between the Ministry and UNESCO-IHE. The intended cooperation will provide financial stability to the institute in the sense that the cooperation will span a period of five years, and will provide an annual budget to pursue specific goals through a programme of mutually coherent activities. The programmatic cooperation will have a value of € 3-5 Million / year and will play a major role in the realization of the UNESCO-IHE Partnership for Water Education.

Conclusions

Since the late nineties OCW has sought ways to further integrate the Institutes of International Education into the Dutch universities. Their minimal requirement is that the OCW contribution is routed via one of the Dutch universities. UNESCO HQ and of UNESCO-IHE are not in favour of such an arrangement, but if OCW persists they formulate the strict condition that such an arrangement can never include any governing role from the side of the university.

Recommendations

The committee recommends that the Dutch Ministry of Education (OCW) takes the initiative to negotiate with UNESCO, UNESCO-IHE and Delft University of Technology regarding the appropriate mode of financing the Institute.

7 FUTURE VIABILITY OF UNESCO-IHE

The last set of leading questions for the evaluation is about viability:

- f) *Are there perceived constraints for the medium term and longer viability of the Institute (i) with regard to the relevance of the programmes (relevant for the continuity); (ii) with regard to the financing of the programmes (relevant for the level of contribution) and specifically with regard to the level of the OCW contribution after 2007 (iii) with regard to the institutional setting (relevant for the routing of the contribution); and (iv) with regard to further integration into the UNESCO and UN systems?*

7.1 Relevance of the programme

Findings

As has been elaborated in section 4 the strategic priorities of UNESCO-IHE for the education and research programs are highly relevant. They are closely linked to the Millennium Development Goals and in particular to the effects of Climate Change. Since the MSc programmes are made more flexible and more demand driven, the relevance for the training of the future managers of the developing world is optimal.

Conclusions

The Committee is certain that the content of the programmes do not form a constraint for the continuity of the Institute.

7.2 Finances

7.2.1 Subsidies from Dutch Government

Findings

The annual financial turnover of UNESCO-IHE is between € 22 and € 25 Million; the overall financial result is around break-even point. Trend analysis shows that over the coming five years the Institute will operate with increasing, large deficits. The income can be divided in three roughly equal parts: subsidy (OCW), tuition fees/fellowships (sponsored) and projects (sponsored). (See for details documents 5 to 8 and 26 in Annex 1)

The subsidy from the Ministry of OCW was in 2006 € 8.6million, which represents 36 % of the total income. The subsidy roughly increases annually by 1% less than could be expected on the basis of price and salary indexes.

According to the original subsidy conditions, the subsidy may be applied to education activities, projects and research activities, the social program of the participants, part of the laboratory staff and to subsidy student housing.

UNESCO-IHE multiplies the subsidy with income from fees and projects with a factor 2.5.

Income from tuition fees for 2006 was around € 8.5 million. It includes the net tuition fee for the programs and student stipends. More than 50% of the fee directly benefits the student.

The NFP program sponsors at present about 40% of the fellowships. The Institute manages to raise additional subsidies from a very diverse range of other donors. Interestingly, the research part of the MSc program (last 6 months) is almost entirely financed by third parties. Fellowships are also financed through the project funding (25%) and a small part of the students (7%) pay themselves for the study costs or have private funding.

The general complaint from the side of the Institute is that the search for donors is very time consuming and has not resulted yet in long term commitments.

UNESCO-IHE has set a minimum target of 200 MSc and 10 PhD graduations per year. They represent only a very small part of the 1000 to 1500 participants that yearly apply for admission. The total level of project income in 2006 was around € 7,8 million. Dutch public and private sources are prominent among the donors. As the OCW subsidy and the tuition fee income increase at a lower rate than the expenditures the project income has to compensate for this increasing gap.

The institute reports a number of critical financial situations that asks for attention.

- The number of PhD and MSc researchers has increased by at least 50% over the past five years. This development, together with the increase in education-related research and contract research has resulted in a steady rise of the research volume. As a rule almost all of these research activities need co-funding. An additional funding is required to support these research activities and to relive pressure on solvency and profitability.
- UNESCO-IHE has set a target for diversifying and stabilizing the funding base for fellowships. At the moment acquisition of fellowships has become a permanent and time consuming activity. There is an ambition to raise multi-year fellowship arrangements.
- As a follow-up of the assessment of the MSc programs the Institute has started a much needed innovation of the educational programs and facilities.

UNESCO-IHE has formulated a proposal to raise the base funding of UNESCO-IHE by OCW with an amount of € 2.4 Million / year. The amount is needed for the following activities:

- the innovation of the educational programs and facilities at € 0.825 Million / year
- co-funding research at € 1 Million /year
- an increased level of cooperation within UNESCO and the UN system including the UNESCO Centres and Chairs, and UNESCO's IHP (International Hydrology Program) and WWAP (World Water Assessment Programs) programmes at € 0.275 Million /year
- Improvement of the operational result to achieve acceptable solvency and current ratio, at € 0.3 Million /year

In addition UNESCO-IHE recommends ensuring the financing of education, in particular the fellowships for the MSc program, by means of multi-year agreements with UNESCO Member States and other donors. It is also proposed to establish a Special Account at UNESCO for the purpose of receiving the concerned functions.

Conclusions

The Committee concludes in general, that the Dutch Government so far has not taken any financial consequence of the upgrading of IHE to an international top institute within UNESCO. The Committee learned during interviews at OCW that the subsidy to the Institutes for International Education (IO) is not based on a system of output financing like in all other parts of (higher) education in the Netherlands, but is purely based on historic arguments. Originally the annual subsidy is based on 222 students years per year, whilst today the Institute processes 365 student years per year, but the subsidy did not change. The result is that the financing of the Institute does not contain any stimulus to increase performance, to attract more students or to obtain more research funding. On the contrary, more activities cause financial problems for the Institute, and hence reticence to change or increase activities to reflect the larger set of global issues that need addressing from UNESCO's perspectives.

A major problem for the Institute is that the majority of financial sources for research projects (European Union, Basic Dutch Research funds (BSIK), and many PhD sponsors) has to be co-financed. Part of the OCW subsidy is now being used to co-fund research projects. The Institute is in urgent need of a basic subsidy to finance its growing research program.

A comparative study between the three larger IO institutes was done by UNESCO-IHE in 2005 at the request of OCW. It showed that whereas the educational output of the three institutes does not differ more than 10% the OCW subsidy varies between € 22 Million and € 8.5 Million. The subsidy to UNESCO-IHE is the lowest of the three institutes, but it achieves to multiply the subsidy with a factor 2.5, in contrast to about 1.5 by the other two institutes. It would be very helpful if OCW could help facilitate the access of UNESCO-IHE to the programs of the NWO (Netherlands Organization for Scientific Research) and STW (Foundation for Technical Sciences, linked to NWO).

The policy of the previous Dutch government was to double the budget of the NFP. At the moment the attitude of the present government is not known. But there seems to be hope for a rise which will automatically raise the number of fellowships for UNESCO-IHE.

Recommendations

It is recommended that :

- the Dutch Government through the ministers of Education, Culture and Science (OCW) and of Development Cooperation, raise the subsidy to UNESCO-IHE with about € 2,5 Million. Such a rise will help to give more balance to the division of subsidies between the different institutes for International Education and will give body to the partnership of the Dutch Government in an important international cooperation on water science and education.
- OCW arranges eligibility of UNESCO-IHE to NOW, STW and other relevant Dutch research programs.

7.2.2 Financial Relations to UNESCO

UNESCO-IHE has the status of a Category I institute. It means that no money from the “Regular Programme Budget” goes to the Institute: it entirely extra-budgetary.

The disadvantage of being part of an intergovernmental organisation is the level of unpaid activities that needs to be carried out being a UN organisation. The Institute is expected to participate or be present in meetings, events and other activities that are not project-based and where at best travel and subsistence costs are reimbursed. These activities, which are accounted for as support to society, have grown and costs yearly about € 0.2-0.3 Million.

Unfortunately, the expectation of the Institute that, being part of an intergovernmental organisation should help to raise income and to be less dependent on Dutch money, has so far not come true.

7.2.3 Other Financial Options

In addition to the plea for an increase of the OCW subsidy the Committee also mentions a few additional options to improve the financial position of UNESCO-IHE. In section 5.2 of this report the Committee suggested some elements that has to be included in a common plan for the future strategy of UNESCO-IHE. Several of the elements have a financial impact: (1) hiring for consultancy; (2) the cooperation in raising extra budgetary funding and (3) the support of the member states to the UNESCO-IHE Partnership for Water Education.

Findings

The Committee noticed that during several interviews some doubt was raised whether the fund raising approach of UNESCO-IHE is efficient and professional enough. People had the impression that the Institute misses opportunities both at public and private sources. UNESCO-IHE does not have any professional acquisition officer.

IHE is by tradition rooted in the Dutch water sector. The Institute maintains a multitude of contacts with the sector through more than 100 of its guest faculty, bilateral agreements with 30 partners, membership of NWP, SENSE, Delft Cluster, NCK, NCR, etc.. These contacts ensure the partial funding of about 75 MSc fellowships. Nevertheless there is a risk that the efforts to be rooted likewise in the world wide UNESCO system drifts the attention of the management away from its Dutch roots. The Committee recommends to assure a continuing attention for the Dutch water sector by creating for instance a special liaison function within the management of the Institute.

UNESCO-IHE and TUD have recorded in a Memorandum of Understanding a number of cooperative arrangements e.g. for academic promotions, guest lecturers, use of the University Library. During interviews it was suggested that it might be beneficial to both institutions to explore additional forms of cooperation e.g. in acquisition.

Conclusions

Apart from the important activities by the directorate, fundraising for research and fellowships depends for the main part on individual members of staff. It is true that their network can be a rich source for contracts, but the general complaint is that it costs them a lot of time and effort which distracts them from their primary tasks in education and research. The Committee recommends studying more efficient fund raising procedures. The Committee got the impression that link to the Dutch network is rather weak at the moment. It is advised to improve that situation.

Universities receive as part of the output financing system a certain amount for every successful academic PhD promotion. It is often indicated as “promotion bonus”. The term gives the wrong impression that the amount is purely a form of research financing. In reality it is part of the total budget of the university that involves a large number of other financial components. Universities normally shift a part of the amount to decentralized chair groups that were responsible for the supervision of the PhD student. It is fair to expect that UNESCO-IHE receive a similar amount when the supervision of students has been totally on their side.

Recommendations

It is recommended to study other options to improve the financial position of the Institute like:

1. Improved financial arrangement with UNESCO with respect to consultancies and raising extra budgetary funding;
2. Promotion of the UNESCO-IHE Partnership for Water Education;
3. to appoint a professional acquisition officer for stable, multi-year fellowships and research projects;
4. To create a special liaison function to maintain and stimulate links to the Dutch Water sector;
5. Exploration of additional forms of cooperation with Delft University of Technology e.g. in acquisition;
6. Arrangements with universities about the transfer of a part of the output financing for PhD promotions.

Finally, taking into consideration the previous recommendations the Committee wholeheartedly recommends the Dutch Government to continue the contribution to UNESCO-IHE for a further fixed term. It will appear essential that both UNESCO and OCW assist the Institute to find ways to improve its financial opportunities. It is not realistic to expect that the Institute can add important new perspectives to strategic objectives that are shared both by UNESCO and the Dutch Government without any extra funding.

ANNEX I RELEVANT DOCUMENTS

The following documents were made available for the external evaluation committee:

1. UNESCO-IHE Institute for Water Education (In co-operation with the IHE Delft Foundation): Work Plan 2003
2. UNESCO-IHE Institute for Water Education: Work Plan 2004
3. UNESCO-IHE Institute for Water Education: Work Plan 2005
4. UNESCO-IHE: Work Plan 2006
5. UNESCO-IHE: Work Plan & Budget 2007
6. UNESCO-IHE: Annual Report 2003
7. UNESCO-IHE: Annual Report 2004
8. UNESCO-IHE: Annual Report 2005
9. UNESCO-IHE: Strategic Plan 2005-2007; Contributing To Global Water Goals
10. UNESCO-IHE: Academic Plan; Prepared by the Academic Plan Committee, 24 March 2005
11. UNESCO-IHE: Committee On Innovation For Education; Summary Report, Draft, Created on 27/10/06; Last edited on: 24/11/06
12. Flyer about UNESCO-IHE Institute for Water Education by Professor Richard A. Meganck, Rector
13. UNESCO-IHE Partnership For Water Education; Concept and Funding Strategy
14. Coalitieakkoord tussen de Tweede Kamerfractie van CDA, PvdA en Christenunie, 7 februari 2007 (Coalition Agreement Cabinet Balkende IV, only available in Dutch)
15. Brief van de Minister van Onderwijs, Cultuur en Wetenschappen aan de besturen van het International Institute for Infrastructural, Hydraulic and Environmental Engineering, de Technische Universiteit Delft en Wageningen Universiteit en Researchcentrum, Kenmerk WO/BS/2000/47429, 15 december 2000 (only available in Dutch)
16. Letter of UNESCO-IHE (Prof. Richard A. Meganck) to the Ministry of Education, Culture and Science, Department of Higher Education/IPC2250 (Mr. J.P. van Ham, Director), Reference OD/269/RAM/VDW, 26 September 2005
17. UNESCO Legal Office: Statutes of the UNESCO-IHE Institute for Water Education, 28 July, 2005
18. Agreement between the Kingdom of the Netherlands and the United Nations Educational, Scientific and Cultural Organization concerning the Seat of the UNESCO-IHE Institute for Water Education (Date not readable)
19. Operational Agreement between the Director General of the United Nations Educational, Scientific and Cultural Organization (Mr. Koïchiro Matsuura), and the Minister of Education, Culture and Science of the Netherlands (Ms. M.J.A. van der Hoeven), Paris, 18 March 2003
20. Cooperation Agreement between the United Nations Educational, Scientific and Cultural Organization (“UNESCO”), represented by its Director-General Mr. Koïchiro Matsuura, and the Stichting International Institute for Infrastructural, Hydraulic and Environmental Engineering Delft, The Netherlands (the “*Foundation*”), represented by the Chairman of its Board, Mr. Bart Sandbergen (Date not readable)
21. United Nations Educational, Scientific and Cultural Organization, Executive Board (Reference 166 EX/24, Paris, 31 March 2003), Draft Financial Regulations of the UNESCO-IHE Institute for Water Education
22. Westvest Netwerk Notarissen, Delft: Statutenwijziging Stichting (referentie MLO/fz/D67388) (RP. 404) (only available in Dutch)

23. Covering letter of Mr. C.J. Kalden, Chair Governing Board UNESCO-IHE to the Ministry of Education, Culture and Science, The Director of Higher Education Mr. J.P. van Ham (reference OD/309/KAL/VDW), 1 September 2006, and Annex: Note on the Institutional Status of the UNESCO-IHE Institute for Water Education (31. August 2006)
24. UNESCO-IHE: Self Evaluation Report, Draft, 11. April 2007
25. UNESCO-IHE Institute for Water Education: Quantifying indicators of academic productivity at UNESCO-IHE, Publication Committee Report nr.1, October 2006
26. UNESCO-IHE: Annual Report 2006
27. Document "Document in Support of the SENSE membership application by UNESCO-IHE", May 2006
28. Research At UNESCO-IHE, May 2007 (draft)
29. UNESCO-IHE, TU-Delft, Report on joint activities of UNESCO-IHE and Delft University of Technology, 2005 and 2006, Delft, February 2007
30. Compound Financial Report 2004
31. Compound Financial Report 2005
32. Compound Financial Report 2006
33. Rol, plaats en financiering van het UNESCO-IHE (only available in Dutch)
34. Programme Report 2004-2005 Water Management
35. UNESCO, Initial Risk Assessment of UNESCO-IHE Institute, Delft, 22 May 2007
36. UNESCO, International Hydrological Programme (IHP), 29th Session of the IHP Bureau, Paris, 17-19 April 2000, Final Report
37. UNESCO, International Hydrological Programme (IHP), 14th Session of the Intergovernmental Council, Paris, 5-10 June 2000, Final Report
38. UNESCO, International Hydrological Programme (IHP), 15th Session of the Intergovernmental Council, Paris, 17-22 June, 2002, Final Report
39. UNESCO, International Hydrological Programme (IHP), 16th Session of the Intergovernmental Council, Paris, 20-24 September 2004, Final Report
40. UNESCO, International Hydrological Programme (IHP), 16th Session of the Intergovernmental Council, Paris, 3-7 July 2006, Final Report
41. Document (unofficial) about financial comparison between ITC (Aerospace/Technical University Twente), ISS (International Institute of Social Studies) and UNESCO-IHE
42. UNESCO-IHE and POWER, Survey of Training Needs Assessment among Alumni and Professionals of UNESCO-IHE and other POWER Partners, Final report, July 2005
43. UNESCO-IHE, Water Education for a Changing World: Messages from Alumni in the Field, 2007

In addition the following links were made available by UNESCO:

1. The Draft Programme and Budget 34 C/5:
<http://unesdoc.unesco.org/images/0015/001501/150144e.pdf>
2. The Executive Board Paper reporting on Evaluation of Education Institutes 174 EX/20:
<http://unesdoc.unesco.org/images/0014/001440/144001e.pdf>
3. Evaluation of UNESCO International Institute of Educational Planning(IIEP):
<http://unesdoc.unesco.org/images/0014/001449/144954e.pdf>
4. Consolidated Findings of the Evaluations of UNESCO's Major Programme I Institutes and Centres: <http://unesdoc.unesco.org/images/0014/001453/145382e.pdf>

ANNEX II LIST OF INTERVIEWEES

Representatives of the following organizations were interviewed:

a) UNESCO-IHE Institute for Water Education

- Chris J. Kalden, MSc, Chair Governing Board UNESCO-IHE
- prof. Henk J.L. Vonhoff, Chair Foundation IHE-Delft
- prof. Richard A. Meganck, PhD, General Director
- Maarten W. Blokland, Deputy Director
- Erwin L. Ploeger, MSc, Head Office of the Director
- prof. Pieter van der Zaag, Water Resources Management
- Caroline M. Figuères, MSc, Head Department of Municipal Infrastructure
- ir. Jan Luijendijk, Head of Hydroinformatics and Knowledge Management Department, Associate Professor in Land and Water Management
- Robert de Bruijn, Head Department Financial Affairs
- Joop de Schutter, Head Department Water Engineering
- prof. Gary L. Amy, PhD, Professor of Urban Water Supply & Sanitation
- prof. Piet Lens, Pollution Prevention and Control core
- Hans van Bruggen, Programme Director
- Jetze C. Heun, PoWER Programme Director, Associate Professor Water Resources Management
- PhD's students UNESCO-IHE: group 1, Xias Liang (China); Durga Lal Shrestha (Nepal) ; Ebenzer D.O. Ansa (Ghana). MSc students UNESCO-IHE: group 2, Thecia Mneney (Tanzania) Muwowo Brian (Zambia)

b) Netherlands Ministry of Education, Culture and Science

- drs. Erik Martijnse, Deputy director Higher Education
- Paul P. van Capelleveen, Coordinator financing Higher Education
- Gert- Jan Thomassen

c) UNESCO Headquarters

- Marcio Barbosa, Deputy Director General
- John Haigh FCA, Chief accountant Financial Reporting & Accounts Section Sector for Administration
- Hans D'Orville, Director Bureau of Strategic Planning
- Walter R. Erdelen, Assistant Director-General for Natural Sciences
- Andras Szöllösi-Nagy, Deputy Assistant Director-General for Natural Sciences, Secretary of the International Hydrological Programme Division of Water Sciences
- John Parsons, Director Internal Oversight Service
- Alaphia Wright, Coordinator, Evaluation Capacity Development, Internal Oversight Service (IOS)
- Birgitte Moller, Director Division of Cooperation with Extra budgetary Funding Sources
- John Donaldson, Legal Affairs
- Jeanne Damlamian, Senior Programme Specialist, Division of Water Sciences Office of the Director and Deputy ADG

d) Netherlands Permanent Representation of UNESCO

– Lot van Schaik, Ambassador

e) Netherlands Ministry of Foreign Affairs/DGIS/Cultural Cooperation, Education and Research Department

– Gerben de Jong, Director Environment and Water Department

– Durk G. Adema, Advisor Integrated Water Resources Management Environment and Water Department

– Andreas J. te Boekhorst, Advisor Cultural Cooperation, Education and Research Department

f) NUFFIC

– Jos Walenkamp, Director Knowledge and Innovation

– ir. Joep Houterman, Director Capacity Building and Scholarships

– Beer Schröder, Head of Capacity Building Programmes, Capacity Building & Scholarships Directorate

g) Technical University Delft (TUD)

– prof.dr.ir. J.T. Fokkema, rector TUD

– prof.dr.ir. Marcel J.F. Stive, Scientific Director Water Research, Centre Delft/Professor Coastal Engineering Section of Hydraulic Engineering

– prof.ir. Louis de Quelerij, Dean Faculty Civil Technique and Geosciences (CiTG)

h) Ministry of Transport and Water: Public Water Works (Rijkswaterstaat)

– Gerard Blom, staff Department of Public Works Water

i) Netherlands Water Partnership (NWP)

– Jeroen J. van der Sommen MSc, Managing Director

ANNEX III Terms of Reference (TOR) for the Evaluation of UNESCO-IHE Final Version, 9 February 2007

A: BACKGROUND

1. Brief history: The UNESCO-IHE Institute for Water Education became operational in 2003. The Statutes state that ‘After four (4) years the Government of the Netherlands, in consultation with the Director-General, shall request an external evaluation by an independent evaluation body, in order to determine whether its contribution should continue for a further fixed-term period.’ In view of a strongly changing environment, it is proposed to broaden the evaluation to include the effects of the integration with UNESCO, the positioning of the Institute in the Dutch Higher Education system, the level of the contribution to the Institute by OCW and the relevance and impact of UNESCO-IHE’s programmes and services to key stakeholders.

2. Mission / Purpose / Main Objectives of UNESCO-IHE:

The mission of UNESCO-IHE is to contribute to the education and training of professionals and to build the capacity of sector organisations, knowledge centres and other institutions active in the fields of water, the environment and infrastructure, in developing countries and countries in transition.

The purpose of UNESCO-IHE is to strengthen and mobilize the global educational and knowledge base for integrated water management, and to contribute to meeting the capacity-building needs of the developing countries and countries in transition.

The main objectives of UNESCO-IHE are defined in the Statutes, as follows:

- (a) to serve as a standard-setting body for postgraduate water education programmes and continuing professional training, building on the experience of the IHE and UNESCO’s International Hydrological Programme and any other relevant experience;
- (b) to develop and deliver state-of-the-art education and research programmes, including postgraduate programmes and continuing professional training, making use of split-site programmes and distance learning in all aspects of integrated water management to young, mid-career and senior professionals and decision makers working with or within developing countries and countries in transition;
- (c) to create and reinforce networks of water sector educational institutions, and to act as an international forum for experts and professionals to exchange scientific, educational and technical information and knowledge in all aspects of integrated water management by strengthening the capacities of its partners, such as regional educational and water sector institutions and organizations, with equal and complementary skills that can add to the overall knowledge base of the network and forums;
- (d) to contribute through research and education to the regular assessment of the water availability and use worldwide and to facilitate the exchange of information and knowledge on water availability and use;
- (e) to assist in studying educational problems in the field of integrated water management which emerge from programmes of assistance to developing countries;

- (f) to assist international organizations, and global initiatives in the coordination and execution on the respective water-related programmes;
- (g) to initiate and facilitate international policy dialogues on scientific and technical grounds on issues concerning water management.

B: PURPOSE OF THE EVALUATION

3. Overall Purpose: The purpose of this evaluation is to assess the functioning of UNESCO-IHE in terms of relevance, impacts, efficiency, effectiveness, and sustainability / funding mechanisms in relation to the activities and results of the Institute, UNESCO's mandate, and the contribution from the Netherlands Ministry of Education, Culture and Science (OCW). In particular, the evaluation will seek to establish:

...in relation to the functions of UNESCO-IHE:

- Whether the results achieved by UNESCO-IHE in the implementation of its activities have satisfactorily contributed to UNESCO's efforts as a specialized UN agency;
- The quality of coordination and interaction between UNESCO Headquarters, UNESCO-IHE, Field Offices and category II Centres with regard to planning and implementation of programmes, including the action taken to avoid possible duplication and overlap;

...in relation to the OCW contribution:

- Whether the operations and outputs of UNESCO-IHE justify the continuation of the Netherlands Ministry of Education, Culture and Science (OCW) contribution after 2007;
- The positioning of UNESCO-IHE in the Dutch higher education system, including the issue of the administrative routing of the OCW contribution;
- The level of the OCW contribution after 2007.

...in relation to the institutional setting:

- How the integration with UNESCO has affected UNESCO-IHE's efficiency and effectiveness vis-à-vis the implementation of its mission;

The evaluation will provide answers to the following primary questions:

- Is the performance of the Institute adequate in terms of fulfilling the goals and functions defined in (i) the original OC&W contribution allocation document (core activities), and (ii) the Statutes of the Institute (mandated functions);
- Is the quality of education and research adequate in relation to the norms that are applied in the Dutch tertiary education system;
- Has the new setting as a category I Institute of UNESCO been beneficial to the Institute, to UNESCO and its Member States, the larger UN system, to the Government of the Netherlands and other stakeholders;
- What are the possible consequences for the status of the Institute in relation to the measures proposed by OCW to adapt the mode of financing of the Institute;
- Are there perceived constraints for the medium-term and longer term viability of the Institute (i) with regard to the relevance of the programmes (relevant for the continuity); (ii) with regard to the financing of the programmes (relevant for the level of contribution); (iii) with regard to the institutional setting (relevant for the routing of the contribution); and (iv) with regard to further integration into the UNESCO and UN systems.

C: SCOPE OF THE EVALUATIONS

4. Time and geographical cover: The evaluation will cover the period from July 2003 to March 2007. Reference to earlier periods may be necessary depending on emerging issues during the course of the evaluation. Visits to UNESCO-IHE in Delft, the Netherlands Ministry of Education, Culture and Science, and UNESCO's Headquarters will be necessary. Further, since the beneficiaries of the various programmes offered by UNESCO-IHE are from all regions, the evaluators must propose and adopt suitable mechanisms for assembling relevant data and information from as wide a geographical coverage as possible.

5. Evaluation questions: The following questions are to be answered by the evaluation. The list given here is indicative, and not exhaustive. OCW, UNESCO-IHE and UNESCO Headquarters may propose additional evaluation questions where they are deemed necessary.

(a) *Relevance and impact:*

- Is the present institutional setting as an exception in the Dutch international education system (IO), i.e. as the only Institute without a parent university, adequate in particular to fulfil the (future) terms of the OCW contribution?;
- What are the main outputs of UNESCO-IHE listed according to its core activities?
- How have these outputs evolved over the period 2003-2007?
- Has the institute been able to address its objectives and functions?
- Do UNESCO-IHE's programmes and services connect to policies and priorities of the international community, Member States, its main donors, customers and clients? Particular attention should be drawn to 1) the alignment with UNESCO's strategies and goals, and 2) the contribution to fulfilling the internationalisation agenda of OCW.
- What impact does UNESCO-IHE have on the strategies of UNESCO?
- Is there sufficient demand for UNESCO-IHE's programmes and services with its clients and customers?
- How do UNESCO and the Dutch Government, and in particular the Ministries of OCW, Foreign Affairs Development Cooperation (BuZA-OS), and Transport, Public Works and Water Management (V&W) perceive the role of UNESCO-IHE in the water and education sectors? Are their perceptions compatible/ complementary? In case of discrepancies, describe these.
- What is the connection of UNESCO-IHE to the national and international education, research and water sectors?

(b) *Efficiency and Effectiveness:*

- Has, in the past four years (2003-2007), the integration with UNESCO – in administrative terms – been fully implemented in accordance with the various institutional agreements?
- Is UNESCO-IHE competitive in the delivery of education, research and capacity building services?
- Has the institutional embedding in the UNESCO system affected the Institute's ability to operate in a flexible way, react promptly to opportunities arising from within the sector and stay competitive and entrepreneurial in a dynamic environment?
- Is the governance structure, and in particular the cooperation between the UNESCO-IHE Institute and the IHE Delft Foundation, conducive for an efficient management of the Institute?

- Is the institutional setting as a category I institute of UNESCO conducive to attract funding for the Institute's activities?

Is the current institutional setting as a category I Institute of UNESCO and being financed exclusively through extrabudgetary funds – effective for contributing to the water agenda of UNESCO and of the broader UN water community?

(c) Sustainability / Funding Mechanisms:

- What are the main medium-long term developments anticipated by UNESCO-IHE (i) with regard to demands from its customers and clients; (ii) with regard to its programmes and services, and (iii) with regard to its funding.
- Is it likely that in the medium-long term the programmes and services of UNESCO-IHE will remain relevant to the international community and that demand for its services will persist?
- Which funding mechanisms are needed to achieve financial sustainability?
- Is the continuation of the OCW contribution justified and is the level of this contribution adequate?
- What placement in the Dutch higher education system would be appropriate, considering the institutional setting as a category I institute of UNESCO? What consequences would this have for the routing of the OCW contribution?
- Are there changes to be applied in the governance structure of the Institute which would further enhance the sustainability of the Institute?
- Are there changes to be applied in administrative processes which would further enhance the efficiency of the Institute?

D: METHODOLOGY

6. Self-Evaluation: The evaluation will start off with a 'Self-Evaluation' by UNESCO-IHE. UNESCO-IHE will thereto appoint an evaluation team consisting of UNESCO-IHE staff members, including representatives from the Rectorate (Chair), the Academic Board and the Management Team. This team will first draft a methodology for the self evaluation and prepare a list of staff, Board members and other people to be consulted during the self evaluation process. The self-evaluation will cover such aspects as:

- Comprehensive descriptions and assessments of the governance of the institute;
- Comprehensive descriptions and assessments of the activities and results achieved by the institute;
- An assessment of the challenges faced by the institute, the approaches adopted in addressing these, and the lessons learned for improving the performance of the institute;
- How did the approaches selected for the implementation of the institute's programmes rate in terms of costs (cost effectiveness)?
- Risk assessment with regards to the financing mechanisms and financial management practices adopted by the institute, and their compliance with the various agreements (See agreements in the List of Documentation below).

The findings will be published in a Self Evaluation Report, containing relevant data, and analyses and assessment of these data in relation to the evaluation questions, and a position of the Institute vis-à-vis conclusions to be drawn from the evaluation questions. This report will serve as an input to the external evaluators. The draft Self Evaluation Report will be presented to the External Evaluators. The evaluators will provide comments and questions on the draft report, after which UNESCO-IHE finalizes the Self Evaluation report and presents it to the External Evaluators.

7. External Evaluation: The external evaluators are expected to use a combination of qualitative and quantitative methods, including:

- An assessment and analysis of the Self Evaluation Report
- Desk Review of relevant documents; the desk review will include all documents furnished by UNESCO and UNESCO-IHE;
- Based on the Self Evaluation Report and the Desk Review the external evaluators will draft an Evaluation Plan showing which additional information is required to answer the evaluation questions and how this information will be collected;

The following methods may be applied:

- In depth, semi-structured interviews with stakeholders. These should in any case include relevant staff from UNESCO-IHE, the Ministry OCW and UNESCO-HQ, the Chair of the UNESCO-IHE Governing Board, and the Chair of the IHE Delft Foundation Board. Other stakeholders may be identified as a part of the planning and implementation arrangements;
- Participatory workshops and/or group interviews with stakeholders;
- Questionnaire surveys;
- Field visits;
- Video and/or Teleconferencing
- Observation;
- Extensive use of secondary data such as evaluations, reports, minutes, search engines etc.

The team will consist of 2 or 3 evaluators. Each evaluator will indicatively have the following time spending:

- Three days desk study & preparation of the Evaluation Plan days at UNESCO-IHE
- Three day interviews in The Netherlands, including selected stakeholders (e.g. via video- or teleconference)
- Two days visit to UNESCO-HQ
- Two days reporting

The proposed time expenditure may differ from the indicative time inputs shown above. The external evaluators will detail their time expenditure and methodology in the Evaluation Plan.

E: EVALUATION MANAGEMENT GROUP AND EXTERNAL EVALUATION TEAM

8. Evaluation Management Group: An Evaluation Management Group (EMG) will be established to oversee the evaluation. The EMG will consist of one representative each from the

Ministry OCW, UNESCO-IOS, UNESCO-IHE, and UNESCO-SC. The Ministry OCW chairs the EMG, UNESCO-IOS is member and UNESCO-IHE and UNESCO-SC are observers. OCW, UNESCO and UNESCO-IHE will each propose two candidates to perform the evaluation. The EMG will select two or three evaluators from the 6 proposed candidates, and OCW will subsequently commission the assignment.

9. External Evaluation Team: The external evaluation is to be carried out by a two or three person independent team of external experts with the following professional backgrounds and/or extensive experience:

- Programme evaluation, Organizational development, and knowledge of the structure and the financing of Higher Education in the Netherlands; and
- Water education, research and capacity building plus knowledge of UNESCO and UNESCO-IHE.

For the sake of independence, the team members should not have had prior involvement in the planning or implementation of programmes of UNESCO-IHE. One of the team members will act as the Team Leader. OCW will provide the External Evaluation Team with the required secretarial assistance. UNESCO-IHE provides logistical support in the Netherlands and for field visits of the consultants. UNESCO-SC provides logistical support for visits of the evaluators to UNESCO HQ.

F: PLANNING AND IMPLEMENTATION ARRANGEMENTS

10. Start of the evaluation: The evaluation will start on February 12, 2007, with the launching of the Self-Evaluation. The Self-Evaluation will be completed by 30 March 2007. The External Evaluation will start on 19 March. The external evaluators will have a preparatory meeting at UNESCO-IHE with representatives from OCW, UNESCO and UNESCO-IHE. Initial activities will include the establishment of the consultation and quality assurance process, the identification of key stakeholders and documents, followed by a desk review, the preparation of comments on the Draft Self Evaluation Report and the preparation of the Evaluation Plan.

11. Evaluation plan: An evaluation plan will be prepared by the external evaluators to include the proposed methodology showing how the evaluation questions will be answered by way of:

- Proposed sources of data;
- Data collection methods /procedures; and
- Types of analyses envisaged

12. Logistics: It is envisaged that the external evaluation team will carry out studies on location in Delft, The Hague and at UNESCO HQ. Contacts with partner institutions and relevant stakeholders may be proposed by the evaluation team. The team will be responsible for being self sufficient in terms of logistics (office space, administrative and secretarial support, telecommunications, printing of documentation, etc.). While the evaluation team is primarily responsible for the dissemination of all methodological tools (surveys, questionnaires), UNESCO-IHE will seek to facilitate this process where possible (providing contact information,

email addresses, etc.). UNESCO will provide office space for the work in HQ and UNESCO-IHE will do the same for work in Delft and provide access to all relevant planning documents and reports.

G: REPORTS AND TIME SCHEDULE

13. Draft and final reports: The Draft Evaluation Report will be furnished by **27 April 2007**. Adequate time will be provided to allow stakeholders to provide comments to the draft report to enable the external evaluators to complete the final report. The Final Evaluation Report will be submitted by **1 June 2007**.

14. Reporting format: The final report should include, but not necessarily be limited to:

- Executive summary (maximum four pages);
- Evaluation purpose;
- Evaluation methodology;
- Major findings (given in terms of achievements and challenges);
- Lessons learnt;
- Recommendations;
- Annexes – including interview list, key documents consulted, survey instruments, etc.

The **executive summary**, in particular, should be in a format suitable for direct incorporation into relevant reports on evaluation to the UNESCO Executive Board, the OCW Director for Higher Education, the UNESCO-IHE Governing Board and the IHE Delft Foundation Board; namely, the Executive Summary should contain the following elements:

- Brief description and background of UNESCO-IHE;
- Major findings – achievements;
- Major findings – challenges; and
- Recommendations

15. Time Schedule: the time schedule is as follows:

12 February	Start of the Self Evaluation by UNESCO-IHE
16 March	Submission of Draft Self Evaluation Report to External Evaluators
19 March	Start of work by External Evaluation Team
23 March	Submission of comments and questions on Draft Self Evaluation Report
30 March	Submission of Final Self Evaluation Report
27 April	Presentation of Draft Evaluation Report
04 May	Acceptance of the Draft Evaluation Report
19 May	Submission of comments and questions on Draft Evaluation Report
01 June	Submission of Final Evaluation Report
08 June	Acceptance of the Final Evaluation Report
08 June	Decision making by Ministry OCW and UNESCO

H: DOCUMENTATION

16. Initial set of documents: The following is an initial list of documentation to be reviewed by the evaluators. The evaluators may need to examine several additional documents in the course of the evaluation, and UNESCO-IHE will recommend further documentation to be examined, if necessary:

- Self Evaluation report
- UNESCO Approved Programme and Budget (C/5)
- UNESCO medium term strategies (C/4)

The various agreements pertaining to the Netherlands Government, UNESCO and UNESCO-IHE, namely:

- Agreement between the United Nations Educational, Scientific and Cultural Organization and the Kingdom of the Netherlands concerning the Seat of the UNESCO-IHE Institute for Water Education;
- Statutes of the UNESCO-IHE Institute for Water Education;
- Cooperation Agreement between the United Nations Educational, Scientific and Cultural Organization and the Stichting International Institute for Infrastructural, Hydraulic and Environmental Engineering Delft, The Netherlands (the “Foundation”);
- Operational Agreement between the Director General of the United Nations Educational, Scientific and Cultural Organization and the Minister of Education, Culture and Science of the Netherlands; and,
- Financial Regulations of the Special Account for the UNESCO-IHE Institute for Water Education.
- UNESCO resolutions addressing UNESCO-IHE and related issues
- Report of the DG UNESCO 2004-2005
- OCW internationalisation policy
- UNESCO-IHE Strategic Plan 2003-2007
- UNESCO-IHE Annual Work Plans and Annual Reports
- UNESCO-IHE Academic Plan
- UNESCO-IHE Research Plan
- UNESCO-IHE Report on Innovation for Education

ANNEX IV LIST OF ABBREVIATIONS AND ACRONYMS

BSIK	Basic Dutch Research Funds, Investments Knowledge Infrastructure
CK-Net	Collaborative Knowledge Network Indonesia
ECTS	European Credit Transfer System
EIM	Business & Policy Research, a Member of Panteia, Zoetermeer, The Netherlands
EU-INCO	International Scientific Cooperation Section of the European Commission Research Framework Programmes
IHE	Institute for Water (Hydrological) Education, Delft
IHP	International Hydrological Programme
IO	International Education
MSc	Master of Science
NAST	Nepal Academy of Science and Technology
NFP	Netherlands Fellowship Program
NOW	Netherlands Organization for Scientific Research
NUFFIC	Netherlands Organization for International Cooperation in Higher Education
NVAO	Dutch Flemish Accreditation Organisation
NWP	Netherlands Water Partnership
OCW	Ministry of Education, Culture and Science, The Netherlands
PhD	Doctor of Philosophy
POWER	Partnership for Water and Research
SENSE	Dutch Research School for Socio-Economic and Natural Sciences of the Environment
STW	Foundation for Technical Science, linked to NOW
SWITCH	Sustainable Water Management Improves Tomorrow's Cities Health
TUD	Technical University Delft
UN	United Nations

UNESCO	United Nations Educational, Scientific and Cultural Organization
UNESCO HQ	UNESCO Head Quarter
UNESCO-ADM	UNESCO Sector for Administration
UNESCO-ERC	UNESCO Sector for External Relations and Cooperation
UNESCO-IHE	UNESCO-IHE Institute for Water Education, Delft
UNESCO-IOS	UNESCO Internal Oversight Services
UNESCO-LA	UNESCO Office of International Standards and Legal Affairs
UNESCO-SC	UNESCO Bureau of Strategic Planning, Natural Science Sector
V&W	Ministry of Transport, Public Works and Water Management, The Netherlands
WaterNet	Capacity Building Network for Integrated Water Resources Management (Southern and Eastern African Region)
WWAP	World Water Assessment Programme