

PARTNERSHIP INITIATIVES INFORMATION SHEET

Name of the Partnership/Initiative

Linked University Consortia for Environment and Development – Industry and Urban Areas (LUCED-I&UA)

Expected date of initiation: Funding pending

Expected date of completion: Expected duration reaching targets depends on funding possibilities.

Partners Involved: Universities, Ministry of Educations, Ministry of Environments, NGOs, local Governments, SME and larger industries, as well as other educational institutions

Governments: Governments of Denmark, Thailand, Malaysia, South Africa and Botswana

Intergovernmental organizations: See above and below

Major groups:

Other: Partnership University Consortia with participating universities:

Danish University Consortium for Environment for Environment and Development – Industries and Urban Areas (DUCED-I&UA): *Aalborg University, Copenhagen Business School, The Technical University of Denmark, The Royal Danish Academy of Fine Arts - School of Architecture, and Roskilde University.*

Malaysian University Consortium for Environment and Development - Industry & Urban Areas (MUCED-I&UA): *Universiti Malaya, Universiti Kabangsaan, Universiti Putra Malaysia, and Universiti Teknologi Malaysia.*

Southern African Consortium of Universities for Environment and Development - Industry & Urban Areas (SACUDE-I&UA): *The University of the Western Cape, The University of Cape Town, Natal University, The University of Durban-Westville, The University of Witwatersrand, and The University of Botswana.*

Thai University Consortium for Environment and Development - Industry & Urban Areas (TUCED-I&UA): *Chiang Mai University, Chulalongkorn University, Mahidol University, and Prince of Songkla University.*

Leading Partner: Danish University Consortium for Environment and Development – Industry and Urban Areas (DUCED-I&UA)

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Main objectives of the Partnership/Initiative

Please provide a brief description: The universities of the LUCED-I&UA partnership cooperate through a twinning arrangement with the aim to increase and link teaching and research capacity in *environmental management and planning in the Urban Environment*. Urban environment is defined in its broad sense and a multidisciplinary approach is applied. In consequence the activities of LUCED-I&UA focus its activities on the urban environment, but comprise of expertise apart from all technical disciplines, sociology, economy, organisational matter etc. that is reflecting the problem oriented approach applied by the consortia. The number of poor people

residing in cities is still rising, why a sustainable approach towards poverty reduction in urban environment includes an integration of activities in three key areas: economic growth and equity, conserving natural resources and the environment as well as social development. Only a multidisciplinary approach can fulfil those needs and there universities will play a key role.

LUCED-I&UA target to build up capacity/knowledge on environmental management and planning practices in environmental administrative units, organisations and the private sector in the participating countries. The main cooperating activities are human resource development through exchange of students, researchers and teachers; course and curriculum development; improved teaching methods; research networking; continued education, and joint research.

Please also provide a brief description of the relationship of the Partnership/Initiative with the objectives of Agenda 21 as well as relevant goals and objectives of the United Nation Millennium Declaration: "Schools and universities also have a critical role to play in raising public consciousness, and Governments themselves must step up their contributions (p63)". Universities must play a more active role for sustainable development in being partners but also by facilitating local partnerships. A globalisation of university partnerships will *inter alia* facilitate local partnerships and break cultural barriers among the various stakeholders locally but also globally. Universities having unified goals as knowledge creators and in establishment of learning societies. Learning societies can only be established if the universities reach out to the society is taken seriously.

Expected results:

Please provide a brief description: The development and establishment of Joint Educational Programmes, which is offered and credited internationally e.g. by joint degree programmes, can act as an important mechanism in knowledge creation and sharing within global structures and will *inter alia* improve quality of education, teaching methodologies etc. The establishment of joint educational programmes through university twinning arrangements may also act as a change agent easing cultural barriers. By exchange of knowledge across borders and to a different intercultural and economic context educational systems may more easily adopt to local needs. Educational programme should develop in accordance to needs set by society why partnerships with the end-users like the public and private sector should be established.

Continued Education - or in-service training – reaches out to educated professionals at universities and targets decision-makers, technicians and others in public and private sectors. Continued education, which is tailored to actual needs, instigates the concept of life-long learning. The establishment of Continued Education Facilities within university structures, which are economically and financially sustainable, may serve as an important mean of capacity building, which reflects local needs. Universities often serve a larger region within in a country and therefore partnerships between universities nation-wise in this field will be of mutual benefit since continued education is often based on national needs. The establishment of continued education facilities can only be justified if a dialogue or partnerships with the users is established in order to reflect their need on a continuous basis.

Introduction of innovative teaching methodologies like problem based learning, interdisciplinary, and project work may be the first step to improve the quality of learning, and to adopt learning more to a real life situation. Innovative teaching methodologies need to target all levels in education from the primary to the tertiary level and basically all subjects. The most cost-effective approach to build up a sufficient resource base is to establish national or regional Centres of Innovative Teaching Methodologies. An example is a network of UNESCO Centres for Problem Based Learning. Partnerships among educational institutions and their end users need to be

established in order to adopt teaching methodologies in accordance to needs.

The development of Internet Based Learning should be applied with care and take into account technical limitations, appropriate teaching methodologies and subjects. Group work, project work, presentations, classes, modelling, examination etc. can be undertaken over the Internet provided they are appropriately structured and take into account technical limitations. Face-to-face tutoring and face-to-face group work in combination with ICT seem to be a feasible solution for the time being. ICT is seen as a very important and continuously changing tool in the knowledge creation and sharing.

The establishment of partnerships on science and technology development with industry on innovative environmental and production technologies may lead to environmental and economic sustainable development. Following the concept of Cleaner Production supports sustainable investments being proactive in environmental regulation. Partnerships of mutual benefits include joint PhD programmes and joint research projects or programmes. The combination of basic and applied research may lead to the development of new and innovative research themes. The establishment of long-term partnerships may be self-sustained through tailored master and PhD and research programmes securing national or regional sustainable development.

Through liaison with e.g. NGOs and local governments universities can play a significant role in public awareness raising on environmental issues. Public awareness may be seen as the first step in changing behaviour towards more environmental friendly practice by the general public. The establishment of a change pattern in the general public or among specific targeted stakeholders may have significant effects in e.g. water savings, energy use but also e.g. practice of handling spill oil, pesticides etc. Partnerships between universities and NGOs and local governments may be a powerful mechanism in public awareness raising.

To define the new role of universities to include a stronger outreach calls for the establishment of appropriate university management structures, which can cope with new demands. For the universities to take on this new role, a change may be required in their regulatory frameworks, credit systems, economic and financial mechanisms, income generation, organisational and administrative structures etc. The development and adjustment of university management structures need to be integrated in the above-mentioned - and is a requisite for a successful implementation.

Specific targets of the Partnership/Initiative and timeframe for their achievement:

The time frame for specific target of LUCED-I&UA will depend on the funding available. It is expected that a phased approach will be applied and a realistic timeframe would be 5 years.

Coordination and Implementation mechanism

Please provide a brief description of expected coordination/implementation mechanism of the Partnership/Initiative. The four university consortia have each their separate administrative set-up with governing boards, secretariats, and University managers. The details of the implementation mechanism and organization of the activities will be set for each of the main activities.

Arrangements for funding

Please describe available and/or expected sources of funding for the implementation of the Partnership/Initiative (e.g. donor government(s); international organization(s)/financial institution(s); foundation(s); private sector; other major groups, etc.). The four consortia are at present each jointly funded by the Government of Denmark and the universities. Furthermore, the consortia will apply for funds from other sources (EU and others) by jointly designing new projects and activities.

Arrangements for capacity building and technology transfer

Please include information if the Partnership/Initiative provides for training, informational support, institutional strengthening and/or other capacity building measures: The partnership main activities focus on training, institutional strengthening and capacity building through partnerships. The main target groups are universities, SME, Industry, NGOs, local governments and the general public.

Please also provide here a brief description of expected arrangements for technology transfer (if applicable).

Through the partnership on science and technology with industry innovative technologies will be developed in partnerships between universities and industry cross border. In broad terms technology is jointly developed and the capacity to apply the technology and develop new innovative techniques are build in the partnerships.

Links of Partnership/Initiative with on-going sustainable development activities at the international and/or regional level (if any)

Please provide a brief description: LUCED-I&UA and its partner universities is an open organization that wishes to link as an organisation or as individual universities to international and regional initiatives for sustainable development. LUCED-I&UA will therefore be pro-active in sharing the experience and concept of the cooperation with other universities situated in cooperating countries as well as universities situated in other countries.

Monitoring Arrangements

Please describe expected arrangements for monitoring of progress in the implementation of Partnerships/Initiative after it will be launched at the WSSD: (E.g. frequency/modalities of preparation of progress reports; electronic updates, news-letters, etc): The activities of LUCED-I&UA are measurable and therefore possible to monitor. Eligible parameters could be number of students passing their exams, number of master graduates, number of courses developed, number of professional training courses - and participants, number of science and technology projects, number of partnerships with industry, NGOs etc. The present system of LUCED-I&UA may be applied, but need to be adopted in accordance with requirements of funding agencies.

Other relevant information:

Web-site (if available): www.duced-iaa.dk (with links to the web-sites of the partner consortia)

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