



WASTE-ECON

“making waste work for the economy”

Volume 1, 1/2001

A. Introduction to WASTE-ECON:

WASTE-ECON is the official title given to the Waste Economy Program, where the mission statement is “Making wastes work for the economy through the development of Integrated Waste Management capacity in Vietnam, Laos and Cambodia”. It is a five year project funded by the Canadian International Development Agency (CIDA), which will last from 2000-2004.

Waste has been a major issue in all nations, especially developing countries such as Vietnam, where industrialization and modernization are rapidly taking place. The issue is significant not only for environmentally but also socially and economically.

Around the world, waste economy has emerged as a new field of study linking environmental science to economics and other sciences. Canada is a leading country in waste economy studies and training.

In Vietnam, the waste economy is an issue of great interest as waste has become a major problem that must be dealt with. Vietnam has developed a Strategy of Solid Waste Management in Urban and Industrial Zones Toward 2020, which was approved by the Government Prime Minister in 1999. Knowledge about the waste economy and the economics of waste management will help the country's development strategies to be implemented in a more sustainable manner.

The University of Toronto is one of the leading universities in Canada and North America. It possesses a team of specialized lecturers in the diverse fields which comprise the waste economy. These specialists will be directly involved in the transfer of expertise and experiences in their respective disciplines to the three countries participating in the project, namely Vietnam, Laos and Cambodia.

I. Vietnam's Key Partners

The lead partner for the project is the National Institute for Science & Technology Policy and Strategy Studies (NISTPASS) of Vietnam's Ministry of Science, Technology and Environment (MOSTE). Other collaborators include:

- National University of Hanoi,
- University of Da Nang,
- National University of Ho Chi Minh City,
- Hanoi University of Civil Engineering,
- Hanoi University of Technology,
- National Economic University of Hanoi,
- Institute of Economics,
- National Environment Agency,
- Vietnam Women's Union,
- Ministry of Construction.

Canadian partners include the University of Toronto as an executing agency in collaboration with Gems of Hope, a Canadian (NGO) and the Ontario Center for Environmental Technology Advancement (OCETA).

Laotian and Cambodian partners will be identified later in 2001.

II. Project's Major Activities in Vietnam

The WASTE-ECON project focuses on major activities including training, transfer of knowledge, and field research into the waste economy, which is still new to Vietnam.

a. Training and Transfer of Knowledge: WASTE-ECON has numerous training components. These include:

- **A Six-week training course on the waste economy.** In July and August 2000, there was a six-week training course held in Hanoi for 32 participants in Vietnam. The main focus points were social, economic and policy aspects of waste management. Special attention was given to the role of women and children in waste management.

Upon completion of the course, Vietnamese assistant lecturers and outstanding participants have been selected to become trainers for local short term (two weeks) training courses. These trainers will participate in an intensive teaching methodology course to be delivered by Canadian instructors. The methodology course is designed to improve teaching methods of the waste economy. Participants in the course will also be provided with study opportunities through pilot projects within the framework of the project.

- **Two week training courses:**

A number of two week training courses will be delivered in across Vietnam by selected trainers. A training program for these courses will be developed on the basis of the six week training program, and will be modified to be adaptable to specific provincial conditions. These reference materials are available upon request.

- Training workshops will be organized by pilot project groups (PPGs) and will focus on typical issues of the waste economy and research methodologies.

b. Research

Pilot research projects will deal with various topics of the waste economy, such as:

1. Organic wastes;
2. Industrial wastes;
3. Urban solid waste landfill siting;
4. Micro-credit and micro-enterprises;
5. Improvements to the livelihoods of Exposing female and child waste pickers.

c. Development of Teaching Program and Staff Training for Implementing the Program

- An appropriate waste economy training program will be designed by the project in collaboration with a number of partner universities in Vietnam. Through the implementation of this training program, it is hoped that the teaching capacity of each institution will be strengthened. Students who will have undergone training in waste economy will become resource persons who will contribute to the national objective of strengthening waste management capacity in Vietnam, to carry on research into waste management issues, and to continue tertiary level waste economy training programs after the completion of the project.

- A postgraduate (Ph.D. and Master) training program will be delivered either in Canada or in ASEAN countries in order to produce qualified specialists in the waste economy. These individuals will become the nucleus of waste economy research and training programs in Vietnam.

d. Development Education

- Opportunities will be provided for Canadian students to enable them to study waste management issues in Vietnam, and jointly participate in pilot research projects;

- Case studies by pilot research teams will be documented to supplement graduate and postgraduate training curricula introduced at the University of Toronto.

e. Knowledge Dissemination and Outreach

- Exchange of knowledge and experiences in the waste economy will be promoted among researchers and policy makers of partner countries and other ASEAN countries through study tours and seminars.

- Outputs of the project will be published on its web site (<http://ots.utoronto.ca/users/WasteEcon>) and in this newsletter, which is to be published twice annually.

g. Gender Approach to Project Implementation

The project's guidelines are to ensure women's involvement in all activities of the project (at a ratio of at least one third).

III. Project Management Structure

❖ Canadian Management includes:

- **Director:** Prof. Dr. Virginia Maclaren, University of Toronto
- **Vice Director:** Prof. Dr. Barbara Murk, University of Toronto

❖ Vietnamese Management includes:

- Steering Committee:

1. **Dr. Pham Khoi Nguyen**, Vice-Minister, Ministry of Science, Technology and Environment (MOSTE), *Chairman* of Vietnamese Steering Committee.
2. **Dr. Vu Ngoc Hai**, Vice-Minister, Ministry of Education and Training, *member*
3. **Dr. Nguyen Van Lien**, Vice-Minister, Ministry of Construction, *member*
4. **Dr. Nguyen Thanh Hoa**, Presidium Member, Vietnam Women's Union, *member*
5. **Dr. Do Hoai Nam**, Deputy Director, National Center for Social and Human Sciences of Vietnam, *member*
6. **Mr. Thach Can**, Director, Department of International Relationship, MOSTE, *member*
7. **Dr. Nguyen Ngoc Tien**, Director, National Institute for Science & Technology Policy and Strategy Studies (NISTPASS), MOSTE, *member*

- Coordinating Committee:

1. **Dr. Nguyen Danh Son**, Chief, Research Department of Sustainable Development, National Institute for Science & Technology Policy and Strategy Studies, MOSTE;

Vietnamese Director & Chairman of Vietnamese Co-ordinating Committee.

2. **Dr. Nguyen Thi Anh Thu**, National Institute for Science & Technology Policy and Strategy Studies, MOSTE; Vietnamese Vice-Director & Vice-Chairman of Vietnamese Co-ordinating Committee.
3. **Mr. Nguyen Khac Kinh**, Vice-Director, National Environment Agency (NEA), MOSTE; member
4. **Prof. Nguyen Dinh Huong**, Director, Hanoi National Economics University; member
5. **Dr. Ha Huy Thanh**, Vice-Director, Institute of Economics, National Centre for Social and Human Sciences of Vietnam; member
6. **Prof. Bui Van Ga**, Director, Environmental Protection Research Centre, Director, Da Nang College of Technology; member
7. **Prof. Lam Minh Triet**, Director, Institute for Environment and Resources, National University of HCM City; member
8. **Prof. Le Trong Cuc**, Centre for Natural Resources and Environmental Studies (CRES), National University of Hanoi; member
9. **Dr. Dang Kim Chi**, Vice-Director, Institute for Environmental Science and Technology, Hanoi University of Technology; member
10. **Ms. Cao Hong Van**, Vice-Director, Family and Life Department, Vietnam Women's Union; member
11. **Prof. Tran Hieu Nhue**, Vice-Director, Centre of Environmental Engineering of Towns & Industrial Areas, Hanoi University of Civil Engineering; member
12. **Dr. Luu Duc Hai**, Vice-Director, Centre for Research and Planning on Urban and Rural Environment, Institute for Planning on Urban and Rural, Ministry of Construction; member

- Project Office:

1. **Mr. Tang The Cuong**, National Institute for Science & Technology Policy and Strategy Studies, MOSTE; Vietnamese Secretary of the Project.
2. **Mr. Le Thanh Binh**, Department of International Relationship, Ministry of Science, Technology and Environment.
3. **Dr. Ho Hoc Luat**, Vice-Director, Department of Scientific personnel & International Relations, Committee for Science and Education of CPV.

B. Activities to date:

1. Project Work-plan Meeting in Toronto, Canada, May 15-19, 2000.

A meeting was organized by the University of Toronto (as Canadian Executing Agency (CEA)) and a seven member Vietnamese delegation led by Dr. Nguyen Danh Son, Director, to discuss project management and delivery measures over the five year period of the project.

Discussions focused on the project's budget allocation for Vietnam, annual workplans, coordination, management and evaluation activities, and eligibility criteria for candidates to be admitted to U of T as part of the project. A draft agreement between U of T and NISTPASS was also discussed. Several meetings with Canadian partners were arranged, including Gems of Hope; OCETA; Ms. Farther Mather, the Director of U of T's Department of International Relations; Mr. Bob Dirstein, Senior Financial officer, CIDA. The lecture framework for the six week training course in Hanoi was exchanged with Canadian instructors, and meetings with Canadian students preparing to research in Vietnam were also held.

The project's management structure comprises a National Steering Committees (PSCs), and a Coordinating Committee (EC) which is supported by a secretariat (consisting of a director, a vice director and a secretary). Every year the PSC and EC will meet once, early in the fiscal year to review and approve annual work plans. The annual budget is allocated on the basis of approved annual work plans to cover estimated costs per activity through transfer of funds to NISTPASS' account. The project fiscal year is based on the Canadian calendar where the fiscal year begins in April.

As requested by CIDA, project performance will be evaluated using the Results Based Management (RBM) approach. RBM helps monitor and adjust project activities to

achieve designed objectives. Monitoring and evaluation of project performance will be undertaken by an evaluation team every six months.

2. Visit to Vietnam

A mission to Vietnam by Canadian Management Director, Prof. V. Maclaren and Gems of Hope Director, Mr. J. Paterson was organized from the 2nd to the 10th of June, 2000 to discuss preparatory activities with NISTPASS for an Agreement signature, the First National Planning Conference, and the Project's first year activities. Preparatory activities for the six week training course and a National Program Launching Conference in August, 2000, were discussed in detail between Prof. V. Maclaren, Dr. Nguyen Danh Son, and Dr. Nguyen Anh Thu, of the Vietnamese Coordinating Committee.

Prof. V. Maclaren met Dr. Pham Khoi Nguyen, Vice Minister of the Ministry of Science, Technology and Environment (MOSTE), the Chairman of the Project Steering Committee, as well as leaders of NISTPASS, and MOSTE's International Relations Department to discuss provisions to be included in the Agreement. She also met Vietnamese partner institutions situated in Hanoi, the Hanoi Urban Environmental Company (URENCO), and worked together with the Director of Quang Ninh provincial Department of Science, Technology and Environment (DOSTE) for locating research sites for the next year work plan.

Mr. John. Paterson discussed opportunities for cooperation with the Vietnam Women's Union. He also visited the Women's Union of Hai Phong City and the Truong Minh Urban Ward to discuss micro-credit grants for low income female waste workers. The Truong Minh ward is likely to be selected as a research site.

3. The six week WASTE-ECON training course, Hanoi, from 24 July to 31 August, 2000

The course was regarded as training of “resources” who will provide prospective Waste-Econ research and training activities in Vietnam. It was attended by 32 graduate level participants all aged less than 45 years, including 13 women (~41%), selected from provinces, universities, research institutions and management agencies throughout Vietnam.

The course covered six topics including Waste-Econ research methodology; Waste-Econ theories and principles; public health, community education, waste management planning, and research methods. Lecturers included professors from the University of Toronto, and the University of Waterloo in Canada, and the University of California, Los Angeles, in the United States. Each lecture presentation was assisted by a Vietnamese instructor.

Upon completion of the course, participants had to write final reports according to eight assigned themes. Exams were also organized upon completion of each topic. All participants passed and were awarded grades of either good or excellent. These participants will become key Waste-Econ trainers and awareness practitioners at the provincial level and some will join pilot project groups.

4. The First National Planning Conference, Hanoi, September, 29- 30, 2000

This conference was the first meeting of the Vietnam-Canada Steering Committee and Coordinating Committee to discuss:

- project work plans (long and short range),
- project management options,
- project evaluation,
- gender cross-cutting issues,
- research topics and pilot project groups,
- nomination of candidates for training in Canada,
- delivery of provincial training courses,

- inclusion of Waste-Econ knowledge into tertiary level curricula taught by selected Vietnamese universities.

It was decided that training courses will be delivered in Ho Chi Minh city, Da Nang, Vinh and Thai Nguyen. Another venue will be identified soon. In each city there will be about 30-40 participants admitted to the course.

Five PPGs have been identified, including:

- Organic waste pilot-project at Bai Chay beach chaired by Prof. Tran Hieu Nhue and CEETIA.
- Industrial waste pilot-project in Ho Chi Minh City, chaired by Prof. Lam Minh Triet and CEFINEA
- Gender outreach pilot-project, for women and children involved in waste collection and disposal in Truong Minh ward, Hai Phong city, chaired by Mrs. Cao Thi Hong Van and the Vietnam Women’s Union
- Solid waste landfill pilot-project, chaired by Prof. Bui Van Ga and Da Nang University’s Environmental Protection Research Center.
- Awareness improvement pilot-project, for child waste pickers, chaired by Youth Research Institute.

So far six partners have committed to include Waste-Econ knowledge into their curricula, including NISPASS; CEFINEA; CEETIA; Institute of Environmental Science and Technology, Hanoi University of Technology (INEST); University of Da Nang; and National Economics University of Hanoi (NEU).

The conference confirmed that women will be involved in all activities of the project at a ratio of at least one third. All project activities will be evaluated on the basis of quantitative and qualitative indicators developed by the evaluation team, and which were approved at the conference.

A full day (August 29, 2000) seminar on "Waste-Econ and Sustainable Development" was also organized during the conference and

50 participants attended. There were 15 (12 Vietnamese and 3 Canadian) papers presented at the seminar, which will be compiled as the Seminar's proceedings in both Vietnamese and English languages.

5. Nomination of Ph.D. and Master's candidates for training courses in Toronto

Two Ph.D. and three Master's fellowships on Waste-Econ training at the University of Toronto will be granted for Vietnamese scholars within the project framework. Notification of the fellowships has been distributed by the Steering and Management Committees to relevant partner institutions for nominating candidates. As of 31 October, 2000, five Ph.D. and five Master's application forms have been received so far.

C. Future Activities:

1. Training

- Training materials used during the six week Waste--Econ training course will be adapted by University of Toronto faculty for two week provincial training courses. These courses are to be organized in three North, Central and South zones of the country;

- Target audiences for the two week training courses will include:

1. Teachers of universities and colleges;
2. Researchers of research institutes and centers;
3. Managers of provincial departments;
4. Staff of waste management enterprises (including URENCO and some industries)
5. Social associations and organizations

- Part II of Waste Management Economics will be taught by University of Toronto faculty in 2001.

2. Research

- Five Pilot Project Groups (PPGs) will be established in 2001 to carry out pilot research projects on Waste-Econ. The Chairperson for each of these pilot research projects will be partner institutions to the Waste-Econ project. Members of PPGs will include those who have been trained through the project's training courses and local people who will participate in pilot projects in their provinces. Pilot project research sites include Hanoi, Hai Phong, Quang Ninh, Da Nang and Ho Chi Minh City.
- Throughout the project, studies on various aspects of waste management in Vietnam will be undertaken by a number of Canadian undergraduate and graduate students.

3. Conferences and Seminars

- The Second Waste-Econ Planning Conference is scheduled for February, 2001 in Ho Chi Minh City with the participation of partner institutions from Canada, Vietnam, Laos and Cambodia.
- Exchanges of knowledge and experience in Waste-Econ will be achieved through a number of study tours to regional countries in ASEAN during 2001.

4. Publications

- A publication of the proceedings on "Waste-Econ and Sustainable Development" will include all papers presented at the seminar by Canadian, American and Vietnamese presenters in August 2000. These papers will also be posted on the web at <http://ots.utoronto.ca/users/WasteEcon>.

WASTE-ECON Program Office:

National Institute for Science & Technology
Policy and Strategy Studies (NISTPASS)
38 Ngo Quyen, Hanoi, Vietnam
Tel: (84-4) 8258035; Fax: (84-4) 8252873
E-mail: vietpro@hn.vnn.vn