

**Observations on the Current Status of Education
in the Agricultural Sciences in Vietnam**

**SUMMARY OF BACKGROUND INFORMATION
OF FOUR AGRICULTURAL EDUCATION UNIVERSITIES**

(Used in helping the Agricultural Education Team' members
to understand the Vietnamese higher education system
before their visit to Vietnam in September 2006)

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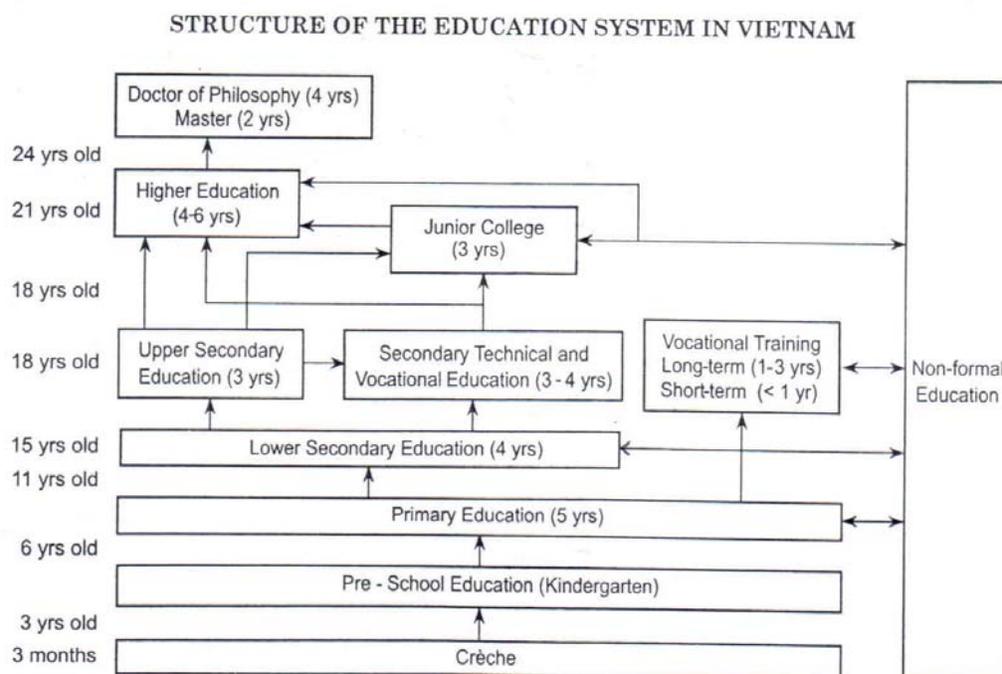
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BACKGROUND

Educational System in Vietnam

Education is traditionally highly valued in Vietnamese society. It is also regarded as being of critical importance to Vietnam's success in the global economy. During the academic year 2004-2005, there were about 22 million students in the educational system (MOET, 2006a). Education in Vietnam occupies 19% (US\$ 2.5 billion or 40,631 billion dong) of all state budget expenditures (Assoc. Prof. Dr. Nguyen Thien Nhan, personal communication, August, 2006). The structure of the national education system is provided in Chart 1:

Chart 1: The Structure of the Education System in Vietnam



Source: Vietnam Education and Training Directory (MOET, 2004, p. 15)

Higher Education in Vietnam

The Ministry of Education and Training (MOET) was established in 1990 and given responsibility for all education and training at the national level, including higher education. Since the mid-1980s, and especially since 1993, there has been a sustained effort to build and reform the higher education system. Over the period from 1993 to 2003, higher education enrollment increased by more than 600 per cent and there was a doubling in the number of higher education institutions. By the academic year 2005-2006, there were 255 universities and colleges (as of May 2006), including two national universities: Vietnam National University,

Hanoi, and Vietnam National University, Ho Chi Minh. A summary of the types of higher education institutions and their distribution from the academic year 1999-2000 to 2005-2006 is provided in Table 1:

Table 1. Higher education institutions and their distribution from 1999-2000 to 2005-2006

	1999-2000	2000-2001	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006 ¹
INSTITUTIONS	153	178	191	202	214	230	255
Junior Colleges	84	104	114	121	127	137	151
Public	79	99	108	115	119	130	142
Non Public	5	5	6	6	8	7	9
Universities	69	74	77	81	87	93	104
Public	52	57	60	64	68	71	79

As background for this project, numerous points can be made about Vietnamese higher education. First, according to Nguyen and McDonald (2001), the Vietnamese higher education system has been totally redesigned twice in the last 200 years. “Now comes the third reorganization, based in the on-going renovation (‘doi moi’) of the country’s social organization so as to fit into a socialist market economy” (Nguyen and McDonald, 2001, p. 1). Second, the administration and financing of education are becoming more decentralized both horizontally and vertically. Horizontal decentralization has meant that, while MOET is pre-eminent, other functional departments within the government also have responsibility for education and training (e.g., the University of Medicine under the Ministry of Medicine, the University of Culture and the Conservatory of Music under the Ministry of Culture and Information, the University of Architecture under the Ministry of Construction, the Vietnam National University Hanoi, and the Vietnam National University HCM). Vertical decentralization means that different levels of government have become more responsible for education and training in their functional, geographic, and political areas.

The third point regarding higher education in Vietnam is that the Decree 85 on educational reform allows local education authorities more power and responsibility to undertake long-term education programs. Fourth, in 1993, the government issued Decree 90/CP² that addressed the structure of national education and expressed commitment to the concept that all should have the right to study and pursue higher education. Fifth, MOET recently introduced the first ten institutional accreditation standards for Vietnam higher education in December 2004. Ten pilot institutions carried out and completed their self-studies between March 2005 and December 2005. Another cohort of ten institutions is expected to complete their self-studies and peer review by December 2006. Between 2007 and 2020, the rest of the higher education institutions in Vietnam will be accredited.

¹ Statistics of higher education institutions for academic year 2005-2006 were based on personal communication by email with a senior expert from the Higher Education Department, Ministry of Education and Training.

² CP stands for Chinh Phu (i.e., the Government)

As for the sixth point, according to MOET's *Pre-feasibility Report regarding the Higher Education Project No. 2*, a large number of small, single-discipline colleges and institutes transformed into one with far greater institutional diversity (MOET, 2006b). Seventh, the growth of a "non-public" sector has been striking. Approximately 11 percent of all students now attend higher education institutions that rely almost entirely on tuition fees for their income. It is expected that this proportion will increase to 40 percent by 2010. Eighth, a related change is that over three-quarters of all higher education students in Vietnam now pay tuition fees.

Ninth, as for funding for future growth, the demand for places in higher education in Vietnam is increasing at a faster pace than their availability. Financing this growth will inevitably require that more of the burden of cost will be transferred to students and their families, and thus comes the conflict between promoting equity of access and encouraging the development of high standards in teaching and research. Tenth, as the system expands, far more institutional autonomy will be required as will better governance and management processes within higher education institutions.

Finally, quality is a major issue, in particular, the quality of the inputs, processes, and outcomes of the higher education sector.

METHODOLOGY

Selection of Case Institutions

Four Vietnamese universities: Hanoi Agricultural University (HAU), Thai Nguyen University of Agriculture and Forestry (TUAF), Can Tho University (CTU), and Nong Lam University (NLU) were selected to participate in this Agricultural Education Project because of their exemplary undergraduate programs in the agricultural sciences.

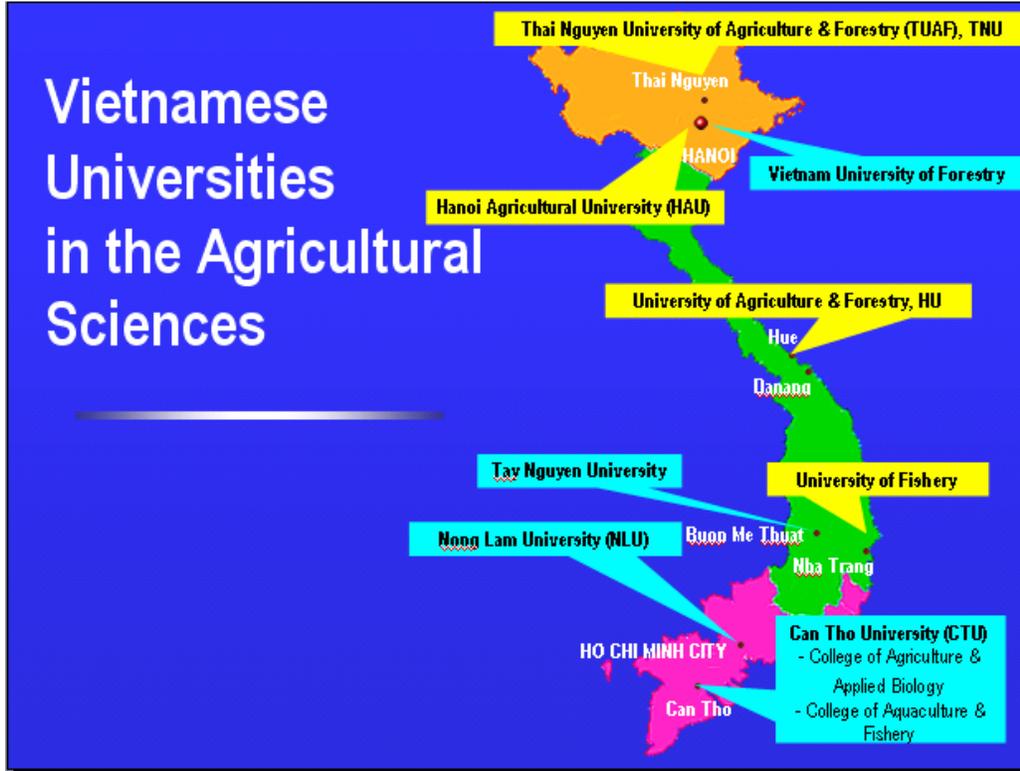
Research Design

This is a multiple case study qualitative research project. For the first phase, background information was gathered from (a) the universities' brochures, (b) the Ministry of Decucation and Training Directory published in 2004, (c) the universities Web sites, and (d) students' transcripts with an effort to provide the U.S. experts an overview of Vietnamese higher education system and of the four participating university before their on-site visits to Vietnam in September 2006

SUMMARY OF FOUR AGRICULTURAL EDUCATION UNIVERSITIES

Among the four universities participating in the Agricultural Education Project, HAU and TUAF are located in Northern Vietnam, and CTU as well as Nong Lam University NLU are located in Southern Vietnam. The distribution of 8 main Agricultural Education univerities is provided in Chart 2.

Chart 2. The Vietnamese universities in the agricultural sciences.



Although being located in different regions, these four universities share five similarities: (a) full-time undergraduate admission, (b) numerous required courses and credits, (c) academic calendar, (d) duration of Bachelor's degree programs, and (e) organization; and (e). First, admission to programs in Agricultural Sciences at the four universities is a two-part process. The students must have High School Diploma and have to follow admission procedures according to the regulations of the Ministry of Education and Training. Depending on the students' selected majors, they have to take examinations of one of the following groups:

Group A: mathematics, physics, and chemistry

Group B: mathematics, chemistry, and biology

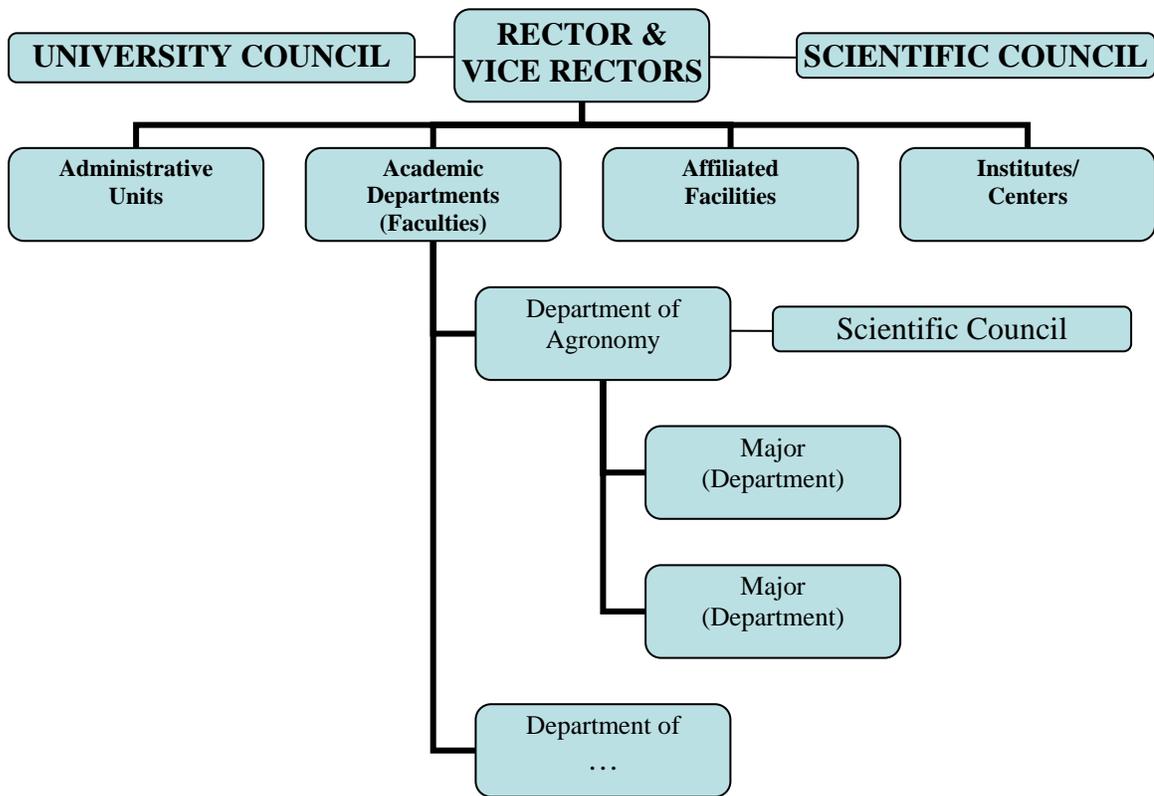
The entrance examination is organized in July every year. The students who pass the entrance exam will receive a letter of admission in September. The examination results can be stored for one year.

Second, the four universities required numerous courses and credits to complete an undergraduate degree. Analysis of the students' transcripts shows that students are required to take 243 – 248 credits or 37-100 courses to complete an undergraduate degree in Agronomy or Plant Growing. Third, higher education institutions in Vietnam are semester-based and operate about 18 weeks per semester starting from August to February (for the first semester) and February to July (second semester). Fourth, as seen from Table 2, the duration of bachelor degree programs seems to be consistent among the four universities. It takes students four years to

complete a bachelor degree in Agronomy at HAU, TAAF, and NLU, while it takes 4.5-5 years at CTU.

Fifth, regarding organization, similar to U.S. universities, the university in Vietnam is divided into departments (known as “faculty” in Vietnamese); each department (faculty) is divided into majors (departments). However, different terms are used when translated into English. Vietnamese universities use the term “faculty” in English to refer to the equivalent of a department in U.S. universities and “department” to refer to the equivalent of a major or specialization. A Vietnamese “faculty” is comprised of departments, and the head of the faculty is the Dean. Each department has a department head. For the purpose of this report in English, the generally accepted terms used by U.S. universities will be used in the body of the report. A typical organization of the university is provided in Chart 3.

Chart 3. A typical organization of the university



The rector is the head responsible for overall management and administration. The University Council is a governing body empowered to formulate strategic planning, policies and to institute university’s academic and administrative rules and regulations. The university’s Scientific Council is an advisory body to the rector in terms of curricula, long and short-term plans for training and research. The four universities are under the jurisdiction of the Ministry of Education and Training (MOET). Academic, budgetary, and personnel matters of the university are under the supervision of MOET.

DIFFERENCES

A major difference that is worth noticing is that Can Tho University is a comprehensive university while HAU and TUAU are mono-disciplinary universities, and Nong Lam is now being transformed into a comprehensive university with a broad range of educational programs. Another difference is that TUAU is a member of the regional Thai Nguyen University, thus it has one more layer in its reporting line than going direct between the University and MOET. The summary of background information of the four universities is provided in Table 2.

TABLE 2. SUMMARY OF FOUR UNIVERSITIES PARTICIPATING IN THE AGRICULTURAL EDUCATION PROJECT

	HAU	TUAF	CTU	NLU
Year founded	1956	1970	1966	1955
Locality served	The main university in agricultural sciences in Northern Vietnam	Northern Mountainous Region	12 provinces in the Mekong Delta	The main university in agricultural sciences in Southern Vietnam
Reporting line	Ministry of Education and Training (MOET)	Regional Thai Nguyen University, then to MOET	MOET	MOET
Mandates/ Mission	To provide training, research and development, and extension. - In pursuit of excellence in training, research and public service, HAU has strong commitment to successfully ensure agricultural and rural development, making contributions to realizing the industrialization and modernization of agriculture and the countryside. - To provide high level manpower for, and improve productivity and efficiency of agriculture in such a way that uses the natural and agricultural resources available to satisfy economic, social, physical and ecological needs of the Vietnamese people using methods and systems that are sustainable, human, socially just and beneficial to the environment.	- To offer higher education in agriculture, forestry science, technology, and management that provides manpower shortage for Northern Mountainous Region of Vietnam. - To play key role in research and technology transfer for solving problems that meets the socio-economic development of Northern Mountainous Region and Vietnam. - To be a center of educational exchanges in agriculture and forestry, and information storage between Northern Mountainous Region and other regions of Vietnam	- Located in the center of the Mekong Delta in the South of Viet Nam, CTU has the important responsibility to educate and train intellectual human resources to meet the regional and national requirements for socio-economic development - Training, conducting scientific research, and transferring technology to serve the region's socio-economic development	- To train experts in the fields of agriculture, science, engineering, foreign languages, education and economics and management with high academic standards, morality and creativity - To conduct research and development activities leading to economic improvement and sustainable natural resource conservation - To create an information center to disseminate appropriate or advanced knowledge and technology to communities
Academic calendar	First semester: Aug-Jan Second semester: Feb-June	First semester: Aug - Feb Second semester: Feb - Jul	First semester: Aug - Feb Second semester: Feb - Jul	First semester: Sep-Jan Second semester: Feb-Jul (18 weeks/semester)
Courses & credits required for a B.Sc. degree*	Agronomy: 248 credits, 37 courses plus a 15-credit thesis	Agronomy: unknown number of required credits, 50 courses plus a thesis	Plant Growing: 248 credits, 100 courses plus a 15-credit thesis	Unidentified course name: 243 credits, 73 courses plus a 10-credit thesis
Degrees and programs	- 4-year B.Sc. in Agri-Business Management Agricultural Economics Agronomy Land Use Management Plant Protection Soil Science - 4.5-year B.Sc. in Agricultural Engineering Veterinary Medicine - M.Sc.: 2 years. - Ph.D.: 2-3 years	- 4-year B.Sc. in Agricultural Economics Agronomy Animal Husbandry and Veterinary Business Accounting Business Administration Forestry Land Management and Agricultural Technology Pedagogy. - 4.5-year B.Sc. In Veterinary Medicine. - M.Sc.: 2-3 years - Ph.D.: 3-4 years * Others:	Offers 66 undergraduate, 15 masters, and 5 doctoral programs - 4.5-5 year B.Sc. in Agriculture Agronomy Animal Husbandry Aquaculture Environment and Natural Resources Management Food Technology Veterinary Medicine Land Management - M.Sc.:3 years - Ph.D.: 3 years.	Offers 40 undergraduate, 11 masters, and 11 doctoral programs - 4-year B.Sc. in Accounting Agricultural and Food Products Processing Agricultural Business Agricultural Economics, Agricultural Engineering and Technology Agricultural Products Processing and Food Microbiology Agricultural Teacher Education Agricultural-Food Products Processing and Human Nutrition Agroforestry Agronomy Animal Science Aquaculture

	HAU	TUAF	CTU	NLU
		<ul style="list-style-type: none"> - 3-year diplomas - 2-year vocational education - 1-4 week short-term training 		<ul style="list-style-type: none"> Aquatic Animal Health Management Aquatic Products Processing Automation Automotive Engineering Biotechnology Business Administration Cadastral Technology Chemical Engineering Commercial Business Administration English Environmental and Natural Resources Economics Environmental Management Environmental Management and Ecotourism Environmental Technology Forest Products Processing Technology Forest Resources Management Forestry Heat Engineering and Refrigeration Information Technology Land Management Landscape and Environmental Design Mechanics for Agricultural Products Processing and Conservation Mechatronics Plant Protection Pulp and Paper Technology Real Estate Rural Development and Agricultural Extension - 5-year program for Veterinary Medicine and Veterinary Pharmacy - 3-year programs for <ul style="list-style-type: none"> Agricultural Engineering and Technology Aquaculture Information Technology Land Management Mechanics for Agricultural Products Processing and Conservation - New disciplines for 2006-2006: GIS and French - M.Sc.: 2-3 years after the B.Sc. - Ph.D.: 3 years after the M.Sc. * Short-term training programs and 2-year programs in various disciplines
Academic departments	10 departments: <ul style="list-style-type: none"> - Agricultural Machinery Engineering - Agronomy - Animal Science and Veterinary Medicine - Economics and Rural Development - Food Science and Technology - Graduate Studies - Land and Environment 	7 departments: <ul style="list-style-type: none"> - Agricultural Education - Agricultural Extension and Rural Development - Agronomy - Animal Science and Veterinary Medicine - Forestry 	- 4 colleges: <ul style="list-style-type: none"> Agriculture and Applied Biology Aquaculture and Fisheries Basic Science Information Technology Technology - 4 schools:	- 12 departments (with 69 majors): <ul style="list-style-type: none"> Agronomy Animal Science and Veterinary Medicine Economics Engineering Environmental Technology Fishery Food Technology

	HAU	TUAF	CTU	NLU
	<ul style="list-style-type: none"> - National Defense Education - Social Sciences and Humanities - Technical Teachers' Training 	<ul style="list-style-type: none"> - Graduate School - Resource and Agricultural Environment 	<ul style="list-style-type: none"> Economics and Business Administration Law Marxism-Leninism and Ho Chi Minh's Thoughts Military Training Center Physical Training Department School of Education 	<ul style="list-style-type: none"> Foreign Languages Forestry Information Technology Land and Real Estate Management - 5 majors directly belong to the University: Political Education Landscaping and Environmental Horticulture Biotechnology Agricultural Technology Education Chemical Engineering
Research, Service Centers, Institutes, Facilities	<ul style="list-style-type: none"> - Center for Agricultural Research and Ecological Studies (CARES) - Center for Experimentation and Transfer of Agricultural Innovations (CETAI) - Center for High Tech Applications (CHTA) - Center for Interdisciplinary Rural Development (CIRD) - Center for Tropical Plant Pathology (CTPP) - Institute of Agricultural Biology (INAB) - Land Administration Center (LAC) - VAC Training and Technology Transfer Center (VAC) 	<ul style="list-style-type: none"> - Center for Agro-Forestry Research and Development Center for Northern Mountainous Region of Vietnam - Center for Computer and Visual Audio - Center for Practical and Experimental Education - Center for Resources & Environment for Northern Mountainous Region - Center of Foreign Languages - Central Laboratory 	<ul style="list-style-type: none"> - Biotechnology Research and Development Institute - Center of Foreign Languages - Hoa An Bio-Diversity Research and Development Center - Learning Resource Center - Mekong Delta Research and Development Institute - Science and Technology Information Center - Services Center 	<ul style="list-style-type: none"> 15 centers - Center for Agricultural Energy and Machinery - Center for Foreign Studies - Center for Heat-Refrigeration Engineering and Equipment - Center for Research, Training, and Consulting Socio-Economics - Chemical and Biological Analysis and Experiment Center - Computer Center - Fruit and Vegetable Processing Research Center - Industrial Crops Research Center - Research and Technology Transfer Center - Research Center for Biotechnology - Research Center for Cadastral Science and Technology - Research Center for Continuing Education - Research Center for Environmental Technology and Natural Resources Management - Research Center for Wood and Paper Technology - Veterinary Clinic
Faculty	500 (67% graduate degree holders; 13 professors, 49 associate professors, 163 Ph.D. or D.Sc. Degree holders, and 174 Master's degree holders, and 193 senior lecturers)	250 (85% graduate degree holders; 2 associate professors, 35 Ph.D. degree holders, 154 Master's and Bachelor's degree holders)	1,161 (42% graduate degree holders; 85 Ph.D.s, 397 Masters)	539 (over 60% graduate degree holders; 17 associate professors, 78 Ph.D. degree holders, 221 Master's degree holders, 371 engineers and bachelors)
Enrollment	8,000 (5,000 full-time, 3,000 part-time)*	7,000 (3,800 undergraduate, 3,200 graduate)	18,196 on-campus (17,401 undergraduate, 397 graduate, 398 part-time) 15,549 off-campus (from satellite training centers in the provinces)	21,000
International Cooperation	<ul style="list-style-type: none"> - 10 countries (12 universities and institutes), including the U.S. (Hawaii University and the University of California). - More than 10 international organizations 	<ul style="list-style-type: none"> - 17 countries - More than 9 international organizations 	<ul style="list-style-type: none"> - More than 20 countries (80 universities and institutes) including the U.S. (University of Hawaii, University of Wisconsin at Madison, Michigan State University, Harvard-Yenching Institute) - More than 23 international governmental organizations and NGOs 	<ul style="list-style-type: none"> - 22 countries (76 universities and institutes), including the U.S. (California State Polytechnic University-Pomona, East-West Center (Hawaii), Department of Agricultural & Biosystems Engineering-Iowa State University, Florida University, Louisiana State University, Texas Agricultural Experiment Station (TAES), University Avenue Baptist Church Hawaii, University of Hawaii at Manoa, University Texas A&M, Texas Tech University, College of Agriculture-Auburn University, Oklahoma State University, University of Oklahoma, University of Florida, University of California-Fullerton) - More than 36 international research institutes, international organizations, and NGOs

For further information about the universities, please visit their Web sites as follows:

1. Hanoi Agricultural University: <http://www.hau1.edu.vn/en/intro.htm>
2. Thai Nguyen University of Agriculture and Forestry: <http://www.tnu.edu.vn/c-agriculture.htm>
3. Can Tho University: www.ctu.edu.vn
4. Nong Lam University: www.hcmuaf.edu.vn

REFERENCES

- Ministry of Education and Training (MOET). (2006a). So lieu thong ke giao duc. Retrieved from <http://www.edu.net.vn/Data/ThongKe/> on August 20, 2006.
- Ministry of Education and Training (MOET). (2006b). *Technical Assistance for Preparation of the Higher Education Project No 2 [HEP2]: Pre-feasibility*. Retrieved from <http://www.tahep2.edu.vn/Default.asp?catid=25> on March 24, 2006.
- Ministry of Education and Training (MOET) International Cooperation Department. (2004). *Vietnam Education and Training Directory* (3rd ed.)
- Nguyen, P. N. and McDonald, J. J. (2001). *Quality assurance in Vietnam higher education*. The sixth QHE Seminar: The End of Quality?
- Nguyen, T. L. H. (2006, August 16). *Personal communication*. Department of Higher Education, Ministry of Education and Training.
- Nguyen, T. N. (August, 2006). *Personal communication*. Chuong trinh: Noi va Lam “Speak and Act” program) organized by People’s Committee of HCMC and HTV.

USEFUL SOURCES

- The U.S. National Academies. (2006 August). Observations on undergraduate education in computer science, electrical engineering, and Physic at select universities in Vietnam (Draft 6). Available from Vietnam Education Foundation (VEF), 2111 Wilson Boulevard, Suite 700, Arlington, VA 22201
- Institute of International Education. (2005). Higher Education in Vietnam Update. Hanoi, Vietnam: Institute of International Education. Retrieved from <http://projects.vef.gov/assessment/uploads/Higher%20Education%20in%20VN-2005%20by%20IIE.pdf> on April 04, 2006.