World Agroforestry Centre
TRANSFORMING LIVES AND LANDSCAPES

SEANAFE MS Thesis Research Fellowship Application Form

PERSONAL INFORMATION

Family name:Nguyen	First name: Van Chung	Other name(s):
Date of birth: 13-10-1982	Nationality: Vietnamese	Gender: Male

Postal address: Northern Mountainous Agricultural and Forestry science

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CURRENT OR MOST RECENT STUDIES

Full name and address of the academic/training institution:
Forestry University of Vietnam

Official title of the academic/training programme: Mater Degree Training Programmes of the Ministry of Education and Training in Agro-forestry
Code number: 60 62 68

Brief description of the theoretical and practical aspects of the academic/training programme:
The applicant is conducting MSc. study in Agro-forestry.
He has to take a course work designed by the Ministry of Education and Training of Vietnam. Then he will carry out a research topic as mentioned above with the following contents:
- The role of different trees, crops, animals in AF systems, soil nutrition in AF systems;
- Survey on natural, socio-economic conditions at the research sites,
- Biological characteristics of plant species the target AF systems;
- Assessment of economic effectiveness of AF models.
- Assessment of environmental impacts of AF models.
    - Ability for soil protection, land use efficiency and sustainability,
    - Ability to keep soil moisture, protection of water resources and relationship between AF with water source stabilization, clean water and water for irrigation,
    - Ability to control environment pollution (soil, water, air…)
- General assessment of AF models,
- Recommendation of solutions to improve the effectiveness of AF models.

OTHER ACADEMIC OR PROFESSIONAL QUALIFICATIONS

Other degrees, diplomas, etc: (state title, year and institution of the award)
B.Sc. of Forestry, 2005, Forestry University of Vietnam

Language skills (*B = Basic; W = Working; F = Fluent*) :

	Speak			Read			Write			Understand		
	B	W	F	B	W	F	B	W	F	B	W	F
English	x				x			x			x	
Other: ……												

Computer skills *(list the computer software which you have mastered)*:
Fluent on Window OS, MS office, (word, excel, ppt...)
Statistic program: IRRIStat 4.0,
Network, internet..etc.

Recent reports and publications in the past 3 years *(list on separate page if necessary)*:

EMPLOYMENT RECORD	
Current employer (full time students list their university, faculty and department)	Department of Agro-forestry, NOMAFSI
Address	Phu Ho Commune
City	Phu Tho Town
State/province	Phu Tho
Country	Vietnam
Phone	+84 210865073
E-mail	vienmnpb@vnn.vn
RESEARCH PLANS	
Name of Academic supervisor	Dr. Le Quoc Doanh MSc. Ha Dinh Tuan
Earliest date and period to undertake the research	2009-2010
Proposed Research Title	Research in economic and environmental impacts of some agro-forestry models in the Northern mountainous regions of Vietnam"
Objectives of research	- Impacts of some agro-forestry models in the Northern mountainous regions of Vietnam assessed. - Factors behind the impacts of the models analyzed. - Solutions for improvement of existing models proposed.
Methodology	**Collection of data and information** - Through domestic and international sources, specialized institutions, - Through surveys and interview of the households that apply AF models, 10 households per site. **Methods for survey of standard samples** • Identification of soil protection ability Method 1: Digging soil traps at the foot of the hills with and without AF models. The dimensions of the traps are 80 x 80 x 50 cm. After each rain, the eroded soil accumulated in the traps will be collected and weighted for calculation of soil erosion. Method 2: Marking 3 plots of $4m^2$ each in AF and non-AF areas, then put 5 sticks in each plots with definite above ground height. At the end of rainy season, measure the height of the above ground parts of sticks to calculate the amount of eroded soils. • Identification of soil moisture From standards plots, 3 soils samples are taken at 20cm depth. The samples are dried at 105^0C until the weight is not changes. The difference in initial and dried weights is used for soil moisture calculation. Relative soil moisture is the ratio (%) of water content to initial weight of a soil sample and is calculated by following formula: $A\% = \frac{(W_1 + W_2) - W_3}{W_2}.100$, where: W_3 : Weight of aluminum container plus soil after drying (g). W_1 : Weight of aluminum container (g). W_2 : Weight of initial sample (g) **Other methods** Calculation of economic efficiency using the following formula: LN = ∑Bt - ∑Ct, where: LN: Benefit from AF models, ∑Bt: Total revenue from AF models, ∑Ct: Total expenditures for AF models. Ecological effects:

	+ The amount of eroded soils is calculated using the following formula: D = $\frac{P}{S}$. 10000, where: D : Amount of eroded soil (T/ha). P : Amount of soil collected in the traps (kg). S : Area of survey plots (m^2). • Comprehensive effects Survey and interview of households on income, expenditures, strength, difficulties of ach models, selection of highly efficient models and recommendation for their application. **Data analysis methods** Data are treated by computerized programs and Excel soft ware.
Expected Outputs/Outcomes	- Highly efficient AF models identified and recommended for the Northern mountainous regions. - Environment impacts of targeted AF models assessed. - Solutions recommended for improvement of AF models.
In which country or countries are you interested to work?	Vietnam
Current source of financial support or donor	non
Which research organization do you plan to work with in implementing your MS research?	Northern Mountainous Agriculture and Forestry Science Institute (NOMAFSI), Forest University of Vietnam (FUV)
Signature Nguyen Van Chung	Date : 30 July 2008