

2 Justification

(a) relevance of the action to the objectives of the programme

The project promotes networking between leading higher education institutes in environmental and resource economics for transition economies in The Netherlands and Germany and leading institutes in environmental and resource economics in China and Vietnam. All institutes focus primarily on environmental and resource use issues related to agricultural and rural development. The institutes in China and Vietnam will benefit in particular from the teaching and research experience in this field in The Netherlands and Germany, and from the access to and familiarity with the international literature. In addition, training opportunities at the PhD level in the Netherlands and Germany will provide Asian students with a broader choice of study-abroad opportunities and enhance their skills. This will then also increase the information about the EU higher education system and hence enhance its attractiveness for Asian students. The institutes in The Netherlands and Germany will benefit from the experience Chinese and Vietnamese researchers have with local circumstances and policy dilemmas, and from the access to local data sources and scientific literature. The project directly contributes to promote regional and multilateral networking between higher education institutions in Europe, South East Asia and China.

(b) relevance of the action to the priorities of the programme

The project directly contributes to the priority area 'Economic development and specific economic sectors'. In particular, it focuses on policies to promote sustainable economic development in rural areas in transition economies in East and South East Asia. It also contributes to the development of economic co-operation in the field of environmental sciences by supporting exchange of staff members from Europe and Asia working in the field of environmental and natural resource economics and by developing joint research proposals.

(c) identification of perceived needs and constraints in the target countries or regions

Economic and institutional reforms in China and Vietnam implemented since the end of 1970s have caused an impressive growth of agricultural production. In several regions, however, this growth was obtained at the expense of the quality of land or other natural resources. As a consequence, future agricultural growth is seriously threatened. This has been recognized by the Government of China. The economic policy aims at reducing the rapid growth rate and to promote sustainable development. Governmental policies aimed at controlling resource degradation are largely based on direct regulation and large-scale public projects. With the transition from planned to market economies, however, resource use decisions have largely been transferred to households. Moreover, with the gradual integration of the economies of both countries into the world trading system, environmental policies increasingly have to take international environmental regimes into account.

In the coming years, efforts aimed at promoting sustainable resource use in rural China and Vietnam will be confronted with and influenced by two major changes. First, the gradual transition from a state-dominated towards a market-oriented economy implies that massive central state regulation will decrease and that economic, decentralised and informal resource management institutions are likely to increase in importance. Second, domestic economic liberalisation, international trade liberalisation and China's entry into the World Trade Organisation (WTO) will greatly affect domestic agricultural prices and hence the use of resources in agricultural production, and bring home international environmental regimes, particularly issues of food safety, ISO standardisation, and eco-labelling.

To promote sustainable development in the near future, there is a strong need in China and Vietnam for young, well-educated decision makers in the government and in the private sector with a profound knowledge of the main issues of environmental policies in the context of a changing economic environment. To meet these requirements, fundamental changes are needed in education and research on resource and environmental economics in both countries, which have been dominated for a long time by the needs of a centrally planned economy and isolated from international developments in this field.

(d) list of target groups and estimated number of direct and indirect beneficiaries

The target groups are staff members and BSc-, MSc- and PhD students at:

- the College of Land Management (CLM) / Centre for Resource & Environmental Economics Study (CREE), Nanjing Agricultural University (NAU), China
- the Environmental Economics Unit (EEU) / Centre for Environmental Economics and Sustainable Development (CEESD), University of Economics (UoE), Ho Chi Minh City, Vietnam

The number of direct beneficiaries of the project in China will be 2 staff members at CLM-NAU who obtain a PhD training in The Netherlands and Germany and 2 staff members who will receive training in The Netherlands and Germany. Indirectly, the whole staff at CLM/CREE-NAU will benefit, as well as the 10 PhD researchers, 30 MSc students and 250 BSc students who complete their education at CLM-NAU each year.

The number of direct beneficiaries of the project in Vietnam will be 2 staff member at EEU/CEESD-UoE who obtain a PhD training in The Netherlands and Germany and 2 staff members who will receive training in The Netherlands and Germany. Indirectly, the whole staff at EEU/CEESD-UoE will benefit, as well as the 30 graduate students and 100 undergraduate students who complete their education at EEU-UoE each year.

(e) reasons for the selection of the target groups and activities

The College of Land Management at Nanjing Agricultural University (CLM-NAU) is the major institute for education in resource and environmental economics and land management in South China. It was founded jointly by Nanjing Agricultural University (NAU) and the Land Administration Bureau of Jiangsu Province in 1992, with the purpose to stimulate education and research in the field of resource economics and land management. The State Commission of Education and the State Commission of Degree Administration founded the PhD programme in 1992. With the creation of the first PhD and MSc programmes in resource economics and land management in China at that time, CLM-NAU has been leading the progress in this field in China since 1992. CLM-NAU is currently one of the two institutes in China having a PhD-programme in resource economics and land management. The general objective of CLM-NAU is to contribute to sustainable resource use and economic development in China through its position as the centre of education and research in resource economics and land management in South China. Its mission includes:

- To train professionals in resource and environmental economics, land administration and land management through its MSc and PhD programmes, with the purpose to supply high quality personnel to the central government, provincial governments, universities and research institutes and private organisations;
- To carry out research to improve the insights into relationships between population, resources and development during economic growth in China (particularly South China) and to be responsible for providing information to decision makers in land use and resource economic policy in South China;
- To promote international exchange in research and education in environmental and resource economics at NAU and to raise the level of education and research at CLM-NAU to international standards.

The research activities at CLM-NAU are concentrated in the Centre for Resource & Environmental Economics Study (CREE-NAU). This institute is one of a few research institutes in China that deal with resource & environmental economics and sustainable development and carry out international projects of research and academic exchange in the field of resource & environmental economics and sustainable development at NAU.

Education and research in resource and environmental economics has become a very important field of attention at Nanjing Agricultural University in recent years. NAU wants to keep its leading position in resource and environmental economics teaching, research and training in South China. The staff at CLM-NAU has expanded rapidly since its establishment, from 25 to 46 persons. The number of students has more than doubled, from less than 400 to about 800 at the moment. To improve the international contacts and follow the latest research developments in the world, more and more staff members at CLM-NAU are encouraged to obtain a foreign PhD degree. Sending staff members abroad for finishing their PhD is considered an important way to develop their human capital.

Since the year 2001, bilingual teaching (in Chinese and English) is required for higher education by the Ministry of Education in China. CLM-NAU has started bilingual teaching in the year 2002 for 40 students, but would like to expand it to more students (in total, there are 450 students from three NAU colleges each year who take the course in resource and environmental economics). More staff members who can teach resource and environmental economics in English are needed, especially staff members trained in foreign countries with a better language environment and an advanced research level.

The Environmental Economics Unit (EEU) is a new unit, established in 1996, within the Faculty of Development Economics, University of Economics, Ho Chi Minh City (UoE). The EEU is responsible for education and training in the domain of resource and environmental economics for students,

government officials, and other interested people in the southern provinces of Vietnam. EEU-UoE is the first institute in this sub-discipline in Vietnam, and has been leading the progress in this field in Vietnam since 1996.

The overall objective of EEU-UOE is to contribute to sustainable resource use and economic development in Vietnam through its position as the centre of education and research in natural resource and environmental economics in South Vietnam. Its mission at current includes:

- To provide lectures and training in resource and environmental economics through its undergraduate and M.A programmes;
- To carry out scientific research on the relationship between resource, environmental degradation and development during economic growth in Vietnam in order to provide information and policy recommendations to decision makers in resource economics and environmental policy;
- To stimulate international exchange in research and education in environmental and resource economics at UoE, and to raise the level of education and research to international standards; and
- To provide an M.A degree and Ph.D supervision in the field of resource and environmental economics at the EEU by the year 2010.

With the rising importance of concepts and instruments based on environmental economics in controlling pollution and improving efficiency in resource exploitation in Vietnam, staff members of EEU conducted many policy-oriented research projects recently. In order to make more efficient contributions and collaborate with relevant international and national agencies, the UoE is on the way to set up a Centre for Environmental Economics and Sustainable Development (CEESD). The CEESD-UoE will take a leading role in conducting research on natural resource economics, environmental economics and sustainable development not only in the South but also at the national level. The function of CEESD-UoE is:

- to organise research activities at regional and national level in this field;
- to collaborate and implement international projects of research and academic exchange in the field of resource & environmental economics and sustainable development at UOE; and
- provide short intensive training courses for various target groups.

The UoE feels a strong need to enhance human resource capacity of the EEU and the forthcoming CEESD, since only two staff members in this field are currently involved in Ph.D training, while the others are at M.A.-level. The EEU staff members are still relatively young; they are familiar with basic concepts and ideas of resource and environmental economics, but lack knowledge of advanced theories in this field and are involved in few collaborations with international institutes. There is a high need to involve these young staff members in lectures, seminars and workshops organised inside and outside Vietnam. The proposed project will make a significant contribution to enhancing human resource capacity, particularly through staff training abroad and short intensive teaching by foreign experts, and promoting international co-operation.

In the coming years, BA and MA programmes will be set up for students specialising in resource and environmental economics. In developing the curricula for these programmes, it is important to learn from experiences with similar programmes at leading universities within this field in the EU, and in particular also from the experiences at Nanjing Agricultural University.

Strengthening research capacity is another vital need of EEU. Through applied research projects, the EEU can provide relevant information and recommendations to policy makers, and prepare case studies to be used by students during lectures. In addition, the EEU staff members will obtain improved research and analytical skills in resource and environmental economics by collaborating with EU experts.

(f) relevance of the action to the target groups

There is a strong need in China and Vietnam for young, well-educated decision makers in the government and in the private sector with a profound knowledge of the main issues of environmental policies in the context of a changing economic environment. To meet these requirements, fundamental changes are needed in education and research on resource and environmental economics in both countries. The project addresses these needs by providing training to staff at leading institutes in environmental and resource economics in China and Vietnam, revising and developing curricula in this field, providing support for executing M.Sc. And PhD-level research in collaboration with European higher education institutes to new staff members, and by promoting international contacts through the organization of two international conferences. These activities directly benefit the teaching staff at the involved institutes, and indirectly benefit future decision makers receiving their education at these institutes.