

PROJECT IDEA NOTE 9

Sector	WATER RESOURCES
Subsector	Water for agriculture
Technology name	Small dams, small reservoirs and micro-catchments
Project name	Development of a graduate programme on climate science and meteorology at the Royal University of Phnom Penh
Background	As indicated in the Strategy for Agriculture and Water, the lack of technical staff (meteorologists, hydrologists and water chemical engineers) is a critical issue at both the national and at the provincial levels of the ministries of Agriculture and Water Resources. At the provincial level, generally there is only one technician who is also responsible for management, and who is usually the director of the provincial department. At the national level, both MAFF and MoWRAM qualified workforce is getting older (the strategy for agriculture and water resources 2009-13). In responding to this challenge, it may be necessary to increase enrolment in key areas of expertise. The Institute of Technology of Cambodia (ITC) is the only engineering institute that offers degree programmes in civil engineering, rural engineering and chemical engineering. There is currently no training program on meteorology in Cambodia.
Purpose and objectives	This project aims to develop human resources in climate science and meteorology to fulfil the growing demand for qualified staff. Specific objectives of the project include: <ol style="list-style-type: none"> 1. Assess and collate local available resources relating to climate sciences and meteorology, 2. Develop graduate curriculum and program, 3. Enrol at least 15 students in the program, and 4. Develop strategic and financial plans, including partnership proposals for securing the continuation of the program
Relationship to national sustainable development objectives	Lack of scientists and engineers is one of key constraints in developing institutional capacities for implementing government development plans and policies. Lack of meteorologists and atmospheric scientists specifically underlines the inadequacy of basis climate change adaptive capacity, which needs to be urgently addressed.
Project deliverables	It is expected that successful completion of this project will produce a quality curriculum for graduate degree in atmospheric science and meteorology, basic air and weather monitoring stations. A total of 15 graduates that can serve as resource persons to further assist in development of the programme, in cooperation with the Department of Meteorology, and the Climate Change Department.
Project scope	The project consists of the development of a 2 year graduate

Annexes

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	programme in atmospheric chemistry and meteorology with a target of 15 students enrolled.
Timeline	4 years
Budget/resource requirements	The project would require US\$ 800,000 to cover curriculum development and implementation with international academic institutions. This budget also covers consumables and minimum laboratory equipment.
Measurement/Evaluation	The success of the project can be measured against the following indicators: the curriculum produced, the number of graduates, strategic plans to secure cooperation and funding to continue delivering of the curriculum.
Challenges	The main challenge of this project lies on whether or not cooperation (technical and financial) at national, regional and global levels can be identified.
Responsibilities and Coordination	<p>The faculty of Sciences of the Royal University of Phnom Penh consists of a number of relevant departments – chemistry, environment, physics and geography that can contribute to the development of this new program. It is proposed that the program sits within the department of environment, given their comprehensive experiences in managing projects, partnerships and networking in additions to the physical resources.</p> <p>It is important to seek and assess local available resources – human, facilities, and on-going cooperation and mobilize these resources to assist in the development of this program. Regional and international support, either technical or financial, is crucial to the successful completion of this project.</p>