



Annex B: Contributors to the EAMP

TEAM Consulting Engineering & Management Co., Ltd (1990, 1995-96)

TEAM Consulting Engineering and Management Co., Ltd. (TEAM) is a well established Thai consulting entity, operating since 1978. Through 25 years of operations, TEAM has accumulated extensive expertise and experience in consulting services in various fields including infrastructure, water resources management and EIA. TEAM were engaged in the preparation of the Project preliminary environmental assessment in 1990 and the EAMP during the period 1995 to 1996. With a total of over 300 independent consultants with diverse professional capabilities, TEAM contributed to the early stages of the development of this document. Other projects TEAM has had involvement in include the Feasibility Study and EIA for the Pa Sak Dam Project, the Khlong Tha Dam Project and the Ecological and Environmental Study of the Pak Mun Project, all in Thailand.

Seatec International & Sinclair Knight Merz (1997 to March 2003)

Staff from Seatec International and Sinclair Knight Merz (SKM) who have been involved with the preparation of the EAMP include the following.

Mr Kieran Looby – Team Leader (2002), Project Director (2000), is a senior engineer and project manager with more than 20 years experience. He has spent ten years as Manager of international consulting companies and has a broad range of experience. Mr Looby was responsible for managing the preparation of EAMP.

Dr Harvey Ludwig – Deputy Team Leader (2002), Project Advisor (1997), has been instrumental in the establishment of environmental regulatory procedures and guidelines in the Asian region over the last thirty years. Dr Ludwig is the author of some 200 professional papers in the environmental field. His work in the Mekong subregion started in the 1970s with his work on the Feasibility Study for Pa Mong Dam.

Mr Mohit Kumar – Technical Coordinator & Institutional Specialist, is a senior environmental scientist at Seatec International. He specialises in EIA, policy development and capacity building. Mr Kumar has been instrumental in providing technical and logistical support for many large Thai and multilateral bank-funded environmental projects.

Mr Neil Urwin – Terrestrial Ecologist, has 26 years of professional experience focusing on Environmental Analysis, of which he has spent ten years in developing countries, including assignments in Southeast Asia. His environmental assessment work has focused on natural resources management, particularly within the ecology sector.

Dr Stephen Berwick – Wildlife Specialist, evaluated the wildlife to be impacted by the Project. He reviewed and evaluated data relating to fauna in the inundation area, verified existing conclusions concerning wildlife, and provided the assessment of wildlife impacts due to the Project.

Dr Timothy Wrigley – Aquatic Ecologist & Water Quality Specialist, is a specialist in the field of aquatic ecology. His professional career of 20 years includes work in both temperate and tropical

monsoonal climatic regions. Dr Wrigley recommended criteria for downstream beneficial uses and undertook the comparison of these criteria with predicted results from water quality modelling. In addition, Dr Wrigley was responsible for the sections of the EAMP relating to fisheries and aquatic ecology.

Dr John Porter – Hydrologist, is a Senior Hydrologist with SKM. His fields of expertise include: yield estimation; reservoir system simulation and water allocation studies; basin management studies; basin modelling and streamflow extension; rainfall and flood estimation; stochastic data generation and statistical hydrology; flood studies and floodplain management. Dr Porter was responsible for co-coordinating and writing all sections of the report relating to hydrology.

Multinational Environmental & Social Assessment Services (2003)

Dr John Bizer (deceased) of Multinational Environmental & Social Assessment Services (MESAS) was the chief re-writer of the October 2003 and March 2004 versions of the EAMP. He had over 35 years of experience in preparing EIAs for hydropower developments. While working with Harza Engineering Company, he conducted more than 50 environmental assessments for new and existing hydropower projects. Dr Bizer had extensive experience in aquatic habitats, riparian flow assessments, water quality, fish populations, terrestrial ecology and hydrology. He worked in Argentina, China, Lao PDR, Nepal, USA, Venezuela and Vietnam. His experience included revisions of environmental assessments for the World Bank and ADB. His clients also included the United States Agency for International Development (USAID), the IUCN, the Japanese Bank for International Cooperation and Montgomery Watson Harza Engineering Company. Through IUCN, Dr Bizer participated in the work of the World Commission on Dams, for which he prepared a review of mitigation measures for large dams and the financing of those measures. Some of the more significant projects on which he worked include the 3,300 MW Ertan Hydropower Project in China, the 1,600 MW Susitna Hydropower Project in Alaska, the 1,000 MW Zhanghewan Pumped Storage Project in China, and the 1,000 MW Taian Pumped Storage Project, also in China. In Lao PDR, he participated in the environmental analysis component of the Hydropower Development Strategy Study. For many of these projects he assisted in developing monitoring plans for their construction and operation, and supervised implementation of mitigation and monitoring programmes.

Consultant Specialists

Snowy Mountains Engineering Corporation (SMEC), of Australia, provides multidisciplinary consulting services in engineering, project management, environmental science and development activities, and has been engaged in assignments throughout the world for 30 years. Major international agencies with which SMEC is registered as a consultant include the United Nations, World Bank and ADB. SMEC became involved with the Project in the late 1980's when they were commissioned to undertake a feasibility study. The six volume study was completed in late 1991 and included an assessment of geological, engineering, environmental and social, and hydrological issues. Since 1994, SMEC been

engaged as the primary hydrological consultant. As a part of SMEC's hydrological reporting, numerous routine hydrological data reports have been prepared, including yearly reviews as well as summary reports. In addition, specialised studies have been undertaken by SMEC for the Project, such as analyses of flooding and geomorphological studies.

Dr Maurice Kottelat is a fish biologist who has worked on taxonomy and ecology of Asian freshwater fishes since 1979. He is an independent consultant, Managing Editor of Ichthyological Exploration of Freshwaters, Honorary Research Associate of the Department of Biological Science of the National University of Singapore and President of the European Ichthyological Society. He has conducted field-work on aquatic biodiversity in Thailand, Indonesia, Malaysia, Vietnam, Philippines, Myanmar, Sri Lanka, China and India, and worked for several months in Lao PDR between 1996 and 2003. Dr Kottelat is the author of more than 200 scientific papers on Asian fishes and five books. Dr Kottelat conducted several biological surveys of fish within the Project area, firstly in 1996 and more recently in 2003. His biological surveys have focused on studying the biodiversity of the fish fauna within the Project area and identifying the presence of any endemic species. Dr Maurice Kottelat is also the author of *Fishes of Laos*, published in 2001, which presents the 481 species of fishes recorded in Lao PDR.

Dr Garry Bernacsek is a fisheries specialist with experience in Asia and Africa, in particular with regard to impacts of large dams on fisheries and aquatic environment. His involvement for the current Project was with the analysis of impacts on fish migration and a review of the aquatic habitats and fish diversity section of the EAMP.

Malaysian Environmental Consultants Sdn. Bhd. The Natural Habitat Study for the Project has been undertaken by Malaysian Environmental Consultants Sdn. Bhd. (MEC), involving the following specialists.

Kishokumar Jeyaraj, Director of MEC, is an environmental consultant specialising in forestry and mapping. He has over 14 years experience throughout Asia. His clients include WWF, DANIDA, UNDP and JICA.

Mr Meredith is an environmental specialist with over 12 years of experience in environmental management. His clients include WCS and the WWF. In 1995 he was involved with the development of the preliminary management plan for the NNT NBCA.

Mr Tunku Yaacob's background is in environmental science, with a focus on the analysis of natural habitats utilising satellite imagery and mapping.

Dr Jarvie is a specialist in the field of natural resource management, with particular emphasis on forestry. He has over 15 years of experience in the environmental field and is the author of over 50 professional publications. His extensive experience includes field research and management recommendations in protected areas and forest concessions in Indonesia, Malaysia, Cambodia and Lao PDR. His involvement in Lao PDR has included a social survey for IUCN, to investigate timber and other uses of forest by government and communities inside the NNT NBCA, and the development of an ecology and botanical section for the IUCN ESMP.

Aruna Technology Ltd. – Chronology of Logging and Assessment of Biomass on the Nakai Plateau. Aruna Technology Ltd. supports public and private sector institutions for sustainable development in the Greater Mekong Sub-region. Their experience is focused on water resources engineering, agriculture, environmental assessment, surveying, cartography, GIS and project management. Aruna provides the tools, expertise and experience in spatial information technology, especially remote sensing including satellite imagery and aerial photography, GPS receivers and GIS software. Aruna interpreted the satellite imagery and are undertaking the ground truthing exercise for the Chronology of Logging and Assessment of Biomass on the Nakai Plateau.

Dr Ramesh Boonratana – Technical Reviewer. Dr. Boonratana fields of expertise include anthropology and biology, with specialisation in wildlife conservation. For the past 20 years, he has been working on biodiversity and natural resources conservation, research, and management issues. He has conducted several wildlife surveys and studies, focusing mainly on large mammals. This experience includes long-term studies on Rhesus Macaque, Proboscis Monkey, the Tonkin Snub-nosed Monkey, the Sumatran Rhinoceros, and the Asian Elephant. More specifically, he has worked in the Nakai-Nam Theun area on several assignments since 1998, and is quite familiar with the conservation and management issues there. Dr. Boonratana was responsible for the technical review of the terrestrial biodiversity issues of the EAMP.

Mr Neil Morton prepared the Pest Management Plan. Mr Morton, entomologist and pest management specialist, has over 30 years experience in pest management. He has technical expertise in entomology; integrated pest management; biological and chemical pest control; phyto-sanitary and quarantine work; pesticide application; agrochemicals; and farmer oriented research and development. He has developed pest monitoring and management systems for many pests on several crops world-wide. Mr Morton recently worked in Lao PDR and Cambodia for the World Bank's Environment Division, assessing crop protection issues.

Terran GIS – Mapping, Data Management & Visualisation, Report Formatting & Presentation: Mr Rorie Wust, of Terran GIS, is a GIS and data management specialist, with experience in both geology and exploration geochemistry. He has over 13 years of experience in these fields, with over ten years in Southeast Asia. Since 1994, Mr Wust has worked extensively throughout Lao PDR, principally on GIS development and data visualisation. His clients include CARE International, UNDP and IUCN. Some projects within Lao PDR on which Mr Wust has participated include the Sepon Gold Mine Project, GIS based flood prediction and management downstream of the Theun-Hinboun Hydropower Project, and map production and thematic mapping for protected area management for IUCN. For the present Project, Mr Wust was primarily involved in the development of maps, data management and visualisation. Terran GIS was responsible for overall formatting and presentation of the October 2003 March 2004, November and March 2005 EAMP documents.