



PROPOSED PROGRAM OF ACTIVITIES
COLLABORATIVE PROJECT ON GENETIC IMPROVEMENT AND
SEED PRODUCTION OF MACROBRACHIUM
From the Output of the Planning Workshop for the Special Five-Year Program
Bangkok, Thailand, 29 November – 2 December 2005
Prioritized during the Third Roundtable Discussion on the
Development of Genetically-Improved Strain of Macrobrachium
Bangkok, Thailand, 3-4 December 2005

Priority Activities	Duration	Responsible Country/Agency
Genetic Improvement of <i>M. rosenbergii</i>		
• Research		
○ Strains of <i>M. rosenbergii</i> with better seed production traits and grow-out characteristics	(target dates)	Thailand, Indonesia, Philippines
Indonesia: 1. Collection of wild stock from Sulawesi to construct a base population GI Macro II, and another potential populations such as Kkalimantan (2006) 2. Evaluation and characterization of GI Macro II, Sulawesi and Kalimantan using molecular marker (2006) 3. Selective breeding program on the synthetic population (2007-2009)	2007	
Philippines: 1. Continue activities on procurement of good broodstock, performance evaluation, improve hatchery & nursery operations (2006) 2. Domestication and selective breeding (2006-2010) 3. Training/ capacity building (2006-2010) 4. Continue stocking density investigation on 5-10 day old PL post larvae at much higher densities for both species and for other indigenous species (2006)	After 2010	
Thailand: 1. Appropriate selective breeding program to improve growth of <i>Macrobrachium rosenbergii</i> in different parts of Thailand 2. Use of allozyme marker to detect genetic variation in <i>Macrobrachium rosenbergii</i> together with growth performance in selective breeding program	2009	
○ Genetically characterized strains of <i>M. rosenbergii</i> of member countries/Characterized <i>M. rosenbergii</i> stocks in SE Asia (population variation in each country: country-to-country requirements, except Thailand and Indonesia)	2008-2010	AQD (coordinating) in consultation with Thailand and Indonesia; Member countries
• Human Capacity Building		
○ Manual on Grow-out of <i>M. rosenbergii</i> in ponds and lake based cages	End 2006	Thailand, Indonesia, Philippines
○ Popular publication on genetic improvement of <i>M. rosenbergii</i>	End of 2008	Thailand, Indonesia
○ Manual on protocols for the genetic characterization of <i>M. rosenbergii</i>	2007	Thailand, Indonesia, Philippines
○ Training for technical persons and extension officers on hatchery and grow-out of <i>M. rosenbergii</i>	mid 2006	
○ Training for fish farmers at core countries	Late 2006	Thailand, Indonesia, Philippines
○ Farm demonstration for recipient countries	Late 2007	Lao PDR, Cambodia, Myanmar, Brunei Darussalam
○ On-site training for fish farmers of recipient countries	Late 2008 or early 2009	Lao PDR, Cambodia, Myanmar, Brunei Darussalam
○ Training on genetic characterization of <i>M. rosenbergii</i> for research officers	2007	AQD, core countries