Draft environmental principles for rehabilitation of tambaks

Draft principles below are intended to provide a basis to guide rehabilitation of brackishwater aquaculture ponds in Aceh.

These draft principles are based on more generic ¨global¨ principles for management of shrimp farming developed through the World Bank/NACA/WWF/FAO Consortium Program on Shrimp Farming and the Environment[1]. These global principles are the outcome of a multi-stakeholder process to develop international consensus on what constitutes better management of shrimp aquaculture, here modified/developed based on our current knowledge of the environmental, and social, interactions of shrimp farming in Aceh.

The draft environmental principles for tambak rehabilitation are as follows.

1. Tambak ponds for rehabilitation should be located in areas that are environmentally suitable for fish and shrimp farming. There rehabilitation should not impact on biodiversity, ecologically sensitive habitats and ecosystem functions. Particular attention should be given to minimizing impacts on mangroves. There should be clear legal title to the land, and the land should not be located in any existing or proposed green belt.

2. Tambak and water supply reconstruction should be done in ways that do not cause ecological damage, including risks from acid sulphate or disruption of water supplies. Aquaculture designs should as far as possible incorporate buffer areas between ponds and natural habitats such as mangroves. Techniques and engineering practices should be used that minimize erosion, leaching of acid sulphate soils and salinization during rehabilitation and subsequent operation.

3. Water supply systems should be rehabilitated in ways that ensure sufficient water supply and drainage. Care should be exercised to avoid salinisation where tambak ponds are located near agriculture areas. Off-site impacts associated with discharge of effluent and solid wastes should be minimized during farming through good water management practices.

4. Wild broodstock collection and hatchery rearing of shrimp post-larvae and milkfish should not use destructive fishing techniques. Hatchery practices that promote quality and healthy shrimp and fish should be encouraged.

5. Feeds and feed management practices should make efficient use of feed resources. Feed and fertilisers should be used efficiently in ways that maintain pond fertility and do not cause degradation of water quality or affect the health or food safety of farmed shrimp and fish.

6. Disease risks for farmed and wild fish and shrimp should be minimised through stocking of ponds with healthy shrimp and fish. Hatchery operators and farmers

1 www.enaca.org/shrimp

should be trained in reducing risks of shrimp and fish diseases through adopting simple risk reduction measures, emphasizing maintaining environmental quality.

7. Use of chemicals that may lead to residues or environmental risks should not be used. While antibiotics are not used in traditional farming, some chemicals used for pond preparation are a concern, and alternatives should be found and promoted.

8. Rehabilitation and operation of tambak farms should be done in a way that benefits local communities and the province. The rehabilitation of tambak farms, important for the livelihoods of many people in coastal areas and the priority is to maximize employment and social benefits to communities. Careful consultation and planning is required with communities to maximize benefits and not create social conflicts.

9. Planning for tambak rehabilitation should also consider the cumulative effects of individual ponds, and seek to ensure that developments are within the carrying capacity of the local environment to sustain farming.