

Chapter 6

CONCLUSION

The results obtained from the April 1992 - January 1993 experiment revealed that:

1. The early wet rice season did not provide favorable environment for prawn growth with very low survival rate. There was few size 1 prawn developed during this period. Thus T2 and T3 where large proportion of size 2 prawn (60%) were harvested could provide additional income to farmers.

2.. The main wet rice season in August provided more favorable environment for prawn growth. About 9 percent of size 1 prawn could be developed from newly resupplying in August as found in T3. The high prawn productivity was mainly attributed by large amount of size 2 prawn. Therefore cull harvesting method was more promising than existing farmer practice provided that young prawn could be supplied in August.

3. All the rice-prawn systems with different harvesting management produced similar amount of size 1

prawn with an average number of 485 prawns.ha⁻¹ (37 kg.ha⁻¹)

4. The environment factors such as soil nutrients, dissolved oxygen, pH of water, water temperature, and water turbidity were not affected by the different prawn harvesting managements and rice monoculture.

5. Rice productions were not affected by either monoculture or integrated rice-prawn culture.

6. The lowest gross margin, net return, return to labor, and cash balance were found in rice monoculture.

7. Gross margin, net return, return to labor per season and cash balance were lower in T1 than those in T2 and T3.

8. The highest gross margin (US \$ 1093.ha⁻¹), net return (US \$ 663.ha⁻¹), return to labor per 2 seasons (US \$ 1061.ha⁻¹), per day (US \$ 3.ha⁻¹) and cash balance (US \$ 837.ha⁻¹) were found in treatment T3 after seven and a half month of farming investment.

9. Rice-prawn system generated more net return and cash balance at the end of rice-prawn growing season than that from rice monoculture when the rice-prawn system was

well managed.

10. Rice-prawn farmers need more initial cash investment during the prawn growing season. Therefore, credit support from the government to the farmers should be provided to help them alleviate the shortage of cash flow for their farm activities.

11. To promote the prawn raising during the wet season in August, prawn hatchery should be established in the community to provide young prawn after the first rice harvest in July, as the natural prawn population during this period is not enough.