



FACTSHEET

Tilapia Culture Systems in Nepal



INTRODUCTION

Nile tilapia is a warm water fish, recognized as popular species for culture both in semi-intensive and intensive system. It is omnivorous fish feeding on wide range of natural food available in pond, and also aggressively feed on formulated feed. Following culture systems are developed by AquaFish research at the Agriculture and Forestry University (AFU).

CULTURE TECHNIQUES/MODELS:

Tilapia - Sahar

In this system, mixed-sex Nile tilapia and sahar of 5-10 g size are stocked in pond at the rate of 20000 and 1250 fish/ha (1:16), respectively. Fish are fed with 24-26% CP feed @ 2% body weight daily and ponds are fertilized with DAP and urea @ 350 and 550 g/100 m² weekly. The culture period in 5-6 months. In this system the reported production was 4-5 ton/ha/year including two production cycles of 5-6 months each with fewer tilapia recruits due to sahar predation.

Carp – Tilapia - Sahar

In this system, carps (6-7 species), mixed-sex Nile tilapia and sahar of 5-10 g size are stocked in pond at the rate of 10000, 3000 and 500 fish/ha, respectively. Fish are fed with 24-26% CP feed @ 2% boy weight daily and ponds are fertilized with DAP and urea @ 350 and 550 g/100 m² weekly. The culture period is 5-6 months. In this system the reported production was 5-6 ton/ha/year including two production cycles of 5 months each.



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Carp - Tilapia

In this system, carps (6-7 species) and all-male Nile tilapia of 5-10 g size are stocked in pond at the rate of 10000 and 3000 fish/ha, respectively. Fish are fed with 24-26% CP feed @ 2% body weight daily and ponds are fertilized with DAP and urea @ 350 and 550 g/100 m² weekly. The culture period is 5-6 months. In this system the reported production was 5-6 ton/ha/year including two production cycles of 5 months each.

Tilapia monoculture

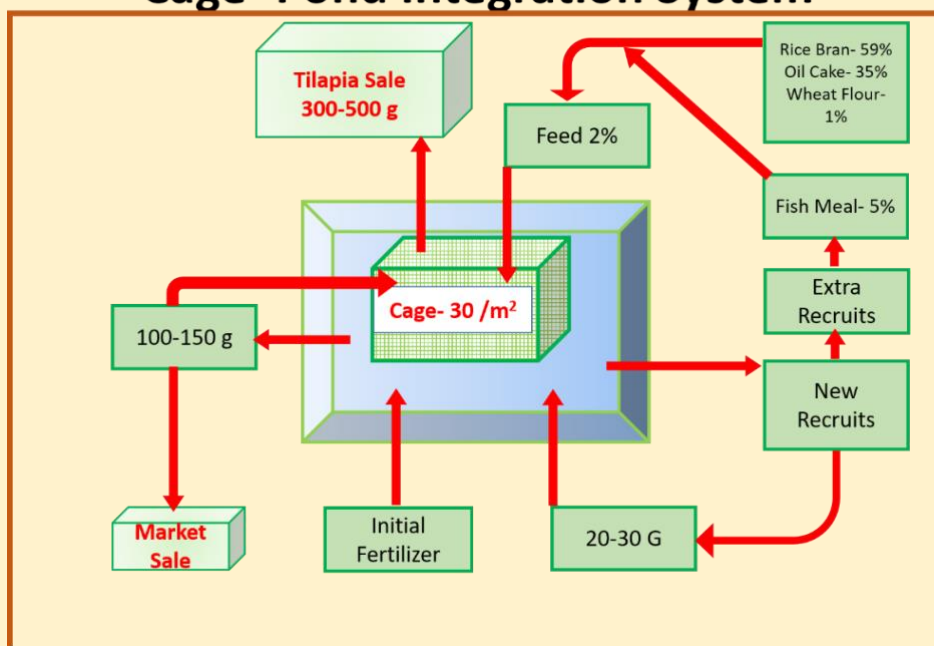
In this system, all-male Nile tilapia of 3-5 g size are stocked in pond at the rate of 20000 fish/ha. Fish are fed with 24-26% CP feed @ 2% body weight daily and ponds are fertilized with DAP and urea @ 350 and 550 g/100 m² weekly. The culture period is 5-6 months. In this system the reported production was 5.5-6.0 ton/ha/year including two production cycles of 5 months each.

Cage - Pond Integration

In this system, mixed-sex large Nile tilapia sized at 100-150 g are stocked in cages suspended in small ponds at the rate of 30 fish/m³, while small Nile tilapia sized at 20-30 g are raised outside the cages in the open pond through the utilization of cage wastes. Upon harvest of the caged tilapia, the cages are restocked by the tilapia raised in the open pond. Feed is applied solely to the caged tilapia; no feed or fertilizer is applied to open-pond tilapia. In this system the reported production was 8 ton/ha/year including two production cycles of 5 months each.



Cage- Pond Integration System



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