

Formula 4

For tilapia (3 months or older) and for catfish/ common carp (1 month or older)

Ingredients

- Finely chopped banana stems: 1 kg
- Fine rice bran: 1 kg
- Fermented fish water (from leftover fish waste): 1 L

Preparation Steps

- Mix the finely chopped banana stems and fine rice bran thoroughly
- Add 1 liter of fermented fish water and stir well
- Form the mixture into small balls
- Feed the fish immediately
- Alternatively, sun-dry the balls for later use

Materials needed

- Grinder and blender
- Open and sealed buckets
- Tray

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Advantages

- Easy and inexpensive process
- Ensures high nutritional quality
- Promotes natural food production by boosting plankton and floating plants

Recommendations for Small Fishes

Use 1 kilogram of feed for every 4,000 fishes, feeding once daily in the morning or afternoon.

From the start of the farming process until fishes are one month old, it is recommended to use fresh feed.

Once the food mixture is prepared, shape it into small round pellets and place them in a feeding container submerged in the fish pond. When the fish reach one month of age, switch to dry food.

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Technical Leaflet RECIPE FOR CARNIVOROUS AND HERBIVOROUS FISH FEED 1/2



Location of implementation
Sndin, Hongngoua, Phonemuag, Nakha and
nanard Village, Nasaythong District,
Vientiane Capital, Laos PDR

Agroecological system:

Zone	Main activities	Climate	Rainfalls	Temperature
Plain	rice/ vegetable	Seasonally tropical (rainy season: June to October)	~ 1300 mm/year	Avg max: 35°C - Avg min: 14°C

Formula 1

For tilapia



Ingredients

- Compost: 100 kg
- Fine rice bran: 20 kg
- Hydrated lime mixed with water: 70 kg
- Water : 70 L
- Bio-fermentation liquid: 1 L

Preparation Steps

- Crush all the ingredient into a fine powder, place them in gauze, and tie the gauze tightly. Put the bundles in a container and pour water over them.
- Soak the ingredient and whisk it for 5–10 minutes twice a day for 15 days. The mixture can then be used and stored for up to six months.

Formula 2

For catfish and common carp

Ingredients

- Dried cow or buffalo dung: 10 kg
- Coconut meal or soybean meal: 3 kg
- Fine rice bran: 10 kg
- Fresh fish, chicken intestines, or fish meal: 5 kg
- Chicken or duck eggs: 15 kg
- Finely chopped water spinach, morning glory, or duckweed: 4 kg
- Cooked sticky rice or regular rice: 2 kg
- Yeast (from shops): start with 1-3 packets (20g/packet), to begin the process

Preparation Steps

1. Place all raw materials, except yeast, into a bucket and mix thoroughly.
2. Add the yeast (if making feed for catfish or frogs, use regular water).
3. Mix until the mixture reaches approximately 60% moisture; when forming pellets, no water should drip on your hands.
4. Feed the mixture into a grinder to form pellets, and then either dry the pellets on a tray or use them fresh.

Formula 3

For catfish and common carp



Ingredients

- Fresh snail bodies: 2 kg
- Cassava: 1 kg
- Corn kernels: 1 kg
- Dried sticky rice: 1 kg
- Ripe bananas: 1 kg
- Fresh water spinach: 1 kg
- Fine rice bran: 1 kg

Preparation Steps

1. Pound and finely grind the snails, then finely grind the cassava.
2. Mix the cassava, snails and corn thoroughly until well combined.
3. Add all the other ingredients, and form the mixture into small balls.
4. Finally, sun-dry the pellets on a tray.

Recommendations for Feeding Herbivorous Fishs

1 - Prioritize Plant-Based Feed

Catfish and common carp are naturally herbivorous or omnivorous, so their diet should mainly consist of vegetables, aquatic plants, and agricultural by-products. Avoid excessive protein-rich feeds, such as meat or fish meal.

2 - Avoid Overfeeding

Overfeeding causes decomposition, leading to water pollution with high levels of ammonia and nitrites, as well as oxygen depletion. Poor water quality weakens fish immunity and can result in disease. Feed small portions 2–3 times daily, and ensure the fish consume all feed within 10–15 minutes. Remove any uneaten feed promptly to prevent spoilage.

3 - Adjust Feeding Based on Season

Fish eat less in cold weather, so reduce the feed quantity in this case. During warm months, when their metabolism is higher, increase the feed slightly

4 - Regularly Monitor Water Quality Using Rapid Test Kits

Check pH, ammonia, and dissolved oxygen levels frequently.