



Booklet: Small Fish Recipes of Assam

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GOVERNMENT OF ASSAM



Booklet:

Small Fish Recipes of Assam

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Introduction

In Assam, fish is a popular, available and affordable source of food. Majority of Assamese people eat fish on a regular basis. Fish has long been associated with the social life of the people of Northeast India, especially in Assam. Fish, particularly small fish are abundantly available from the natural waterbodies for consumption all over the state of Assam.

Though the consumption of fish is high in Assam, as per the last National Family Health Survey (NFHS-5), 35 % of children under the age of five years are stunted or too short for their age, 22% are wasted or too thin for their height, 9 % are severely wasted and 33% are underweight in Assam. These high levels of under nutrition among children are still a major problem in Assam. Similarly, anemia is widely prevalent among adolescent girls and women mostly among pregnant and lactating women.

Fish plays an important role as a cheap source of providing the essential micronutrients including vitamins and minerals for a well-balanced nutrition. Among the different varieties of fishes available for human consumption, locally available small fish species have been found to have immense potential to improve nutrition and wellbeing. When eaten whole, they are particularly rich in micronutrients like calcium, vitamin A, iron and zinc, which play important roles in child development and growth. Small fish improves nutrition of pregnant and lactating mothers as well as young children during the critical first 1000 days of child development. Small fishes which are rich in micronutrients can easily be used in variety of nutritious and delicious local recipes, which can be a part of healthy, diversified diet for children, pregnant woman, and lactating mother.

To enhance nutritional outcomes from aquatic foods and to assist in accelerating the progress of reducing malnutrition among the target groups in different parts of Assam, WorldFish along with ARIAS Society and the Department of Fisheries, Government of India under the World Bank funded APART Project organised a series of fish nutrition promotion program activities, conducted awareness programs, piloting and demonstration of fresh small fish and dried small fish-based products in different project districts. During the piloting and demonstration program in different districts, WorldFish team collected information on the different types of small fish recipes popular among various communities of Assam.

Based on the interactions and discussion with the Communities, information collected on different methods of preparation followed by the communities and the products prepared and evaluated during the piloting and demonstration programs, WorldFish team attempted to compile the small fish recipes in the form of a recipe booklet. This small fish recipe booklet describes small fish-based recipes prepared using fresh small fish, hygienically dried small fish and dried fish powder.

Fish recipe using fresh small fish powder



How to prepare fish powder

- Collect good quality fresh small fishes from pond, beel or from the market
- Clean the small fishes well, remove the gut and wash properly. Head portion has to be retained while cleaning the small fishes.
- Mix the fishes with turmeric and salt immediately
- Fry the small fishes in mustard oil for 15-20 minutes over low heat
- Allow the fried fishes to cool for 5-10 minutes
- Prepare fish powder with a locally available grinder or mixer and store it in a clean airtight container with lid



1. Small fish soup

“Fish soup” is a quick and easy to prepare dish suitable for young children. The ingredients required and the method for the preparation of fish soup is given below:

● Ingredients:

- Fish powder prepared using fresh small fishes – 250g
- Cooking oil – 80ml
- Small-sized onion sliced
- Ginger paste – 1tablespoon
- Garlic paste – 1tablespoon
- Turmeric powder – 1tablespoon
- Jeera powder – ½ tablespoon
- Dhania powder – ½ tablespoon
- Fish masala powder– ½ tablespoon
- Garam masala – ½ tablespoon
- Chili powder – ½ tablespoon
- Fresh chili – 3-4
- Small tomato chopped
- One small sized cabbage
- Salt as required
- Black pepper – ½ tablespoon
- Corn flour – 2 tablespoons
- One bunch of dhania leaves



● Method of preparation:

- Heat oil in a pan and add sliced onion, green chili, ginger paste, garlic paste and sauté for a few minutes.
- Add chopped tomatoes, cabbage, and cook until the oil separates from the mix.
- Add turmeric powder, fish masala powder, jeera powder, garam masala powder, dhania powder, chilli powder, salt and sauté for 2 minutes.
- Add fish powder and cook for a few minutes.
- Add some hot water.
- Add Corn flour for thickening.
- Add black pepper.
- Cook for 30 minutes and just before turning off the heat, add a few corianders leaves
- Serve hot.

2. Fresh small fish powder with mixed vegetables curry

“Small fish powder with mixed vegetables curry or locally called **Xakor logot horumasor guri**”. In this recipe the freshly prepared small fish powder is cooked along with mixed vegetables.



● Method of preparation:

- Wash, cut all vegetables and keep aside.
- Heat oil in a pan, add sliced onion, ginger and garlic paste and saute for few minutes
- Add tomato, brinjal, bottle gourd, cabbage and cook until the oil separates from the mix.
- Add turmeric powder, dhania powder, fish masala powder, chilli powder, jeera powder, salt as required and saute for 2 minutes.
- Add fresh small fish powder and cook for 10 minutes.
- Add garam masala.
- Add hot water and cook for 45 min just before turning off the heat and add dhania leaves.
- Serve hot with steamed rice.

● Ingredients:

- Fish powder prepared using fresh small fishes – 250g
- Mustard Oil – 100ml
- one medium – sized onion chopped
- Garlic paste – 1tablespoon
- Ginger paste – 1tablespoon
- Turmeric powder– ½ tablespoon
- Fish masala powder – ½ tablespoon
- Garam masala – ½ tablespoon
- Jeera powder – ½ tablespoon
- Dhania powder – ½ tablespoon
- Red chilli powder – ½ tablespoon
- Potato chopped-150g
- Cabbage – 500g
- Brinjal – 150g
- One small size bottle gourd
- Salt as required
- Green leafy vegetables
- Dhania leaves

Fish recipe using fresh small fish

1. Fresh small fish with mixed vegetables curry

Every Assamese household enjoys this preparation. This curry can be made with fresh small fishes and mixed vegetables. Small fishes combined with vegetables in a dish is known locally as "**xakor logot horumass.**"

Ingredients:

- Fresh fried small fishes – 250g
- Cooking oil – 100ml
- Onion sliced – 3 medium-sized
- Ginger paste – 1 tablespoon
- Garlic paste – 1 tablespoon
- Turmeric powder – ½ tablespoon
- Fish masala powder – ½ tablespoon
- Garam masala – ½ tablespoon
- Jeera powder – ½ tablespoon
- Dhania powder – ½ tablespoon
- Red chili powder – ½ tablespoon
- Potato chopped – 50g
- One Cabbage – 500g
- Tomato – 100g
- Brinjal – 150g
- One small size bottle gourd
- Salt as required
- Green leafy vegetables
- Dhania leaves



Method of preparation:

- Wash, cut all vegetables and keep them aside.
- Heat oil in a pan, add sliced onion, ginger-garlic paste and sauté for a few minutes.
- Add tomato, brinjal, bottle gourd, cabbage and cook until the oil separates from the mix.
- Add turmeric powder, dhania powder, fish masala powder, chili powder, jeera powder, salt and saute for 2 minutes.
- Add fried small fish and cook for 10 minutes.
- Add garam masala.
- Add hot water and cook for 45 minutes.
- Add dhania leaves (for better flavor).
- Serve hot with steamed rice.

2. Fresh small fish steamed in banana leaves

One of Assam's most popular fish recipes is “**Mass patot diya**” which is a delicacy for Assamese people.



● **Ingredients:**

- Fresh Small fish – 250g
- Garlic- 1 medium size
- Ginger paste - 1 tablespoon
- Curry Leaves- 1 bunch
- Onion sliced- 1 medium-sized
- Fresh dhania leaves –one bunch
- Green Chillies- 5-6 (or according to taste)
- Mustard oil- 2-3 tablespoon
- Salt as required
- Banana Leaf

● **Method of Preparation:**

- Wash and clean the fresh small fishes thoroughly.
- Mix the fish with 2-3 teaspoon Mustard Oil and other ingredients.
- Wrap the fish with all ingredients in a banana leaf and tie with a thread.
- Place directly on hot charcoal or a hot 'Tawa' and cook on both sides for 25-30 minutes.
- Open the banana leaf packet.
- Transfer to a plate/bowl.
- Mix thoroughly with hand.
- Serve hot with steamed rice.

3. Fresh Small fish fry

This recipe is easy and simple to prepare. Mixed small fish fry is prepared frequently in most of the households and available in almost every hotel and Dhaba in Assam.



● Ingredients:

- Fresh Small fish- 250g
- Turmeric- ½ tablespoon
- Green chilli- 3-4 (according to requirement)
- Mustard oil as per requirement
- Onion- 3-4 medium size
- Dhania leaves
- Salt as per requirement

● Method of preparation:

- Marinate the washed small fish in turmeric powder and salt. Set aside.
- Finely chop the onion and 3-4 green chillies.
- In a flat frying pan, heat 4-5 tablespoons of mustard oil.
- When the oil is hot, add the fish. Cook over medium heat, stirring constantly to prevent the fish from burning.
- When the fish begins to turn brown add the onion and green chillies and continue to cook until the onions get brown along with the fish & include dhania leaves.
- Serve hot with steamed rice.



4. Small fish with Roselle leaves

"Tengamora logot horumasor jul or Small fish with Roselle leaves" is a small fish recipe which is typically prepared during the monsoon season when Roselle leaves are available.

● Ingredients:

- Fresh Small Fishes - 250 g
- Roselle leaves- 1-2 bunch
- Green chilies- 3-4 nos
- Turmeric – 1tablespoon
- Onion- one medium size
- Oil and salt as required

● Method of preparation:

- Clean the fresh small fishes thoroughly in water.
- Clean the roselle leaves in water then chop them small.
- Marinate the fish with oil, salt and turmeric.
- Fry the marinated fish and keep aside.
- In a pan add oil and sliced onion and saute for a few minutes.
- Add chopped roselle leaves, salt, turmeric and green chilies.
- Add required amount of water.



Fish recipe using dried small fish powder



How to prepare dried fish powder from dried small fishes

- Collect hygienically dried small fishes from market or homemade dried fishes.
- Soak the dry small fishes in warm water for 5 minutes and wash properly.
- After washing allow the water to drain properly.
- Fry the dry small fishes for 10-15 min without oil over low heat.
- Add little amount of salt at the time of frying.
- Cool the fried fish for 10-15 minutes.
- Prepare fish powder with a locally available grinder or mixer and keep it in a clean airtight container with lid.



Fish recipe using dry small fish

1. Dried small fish with pea and tomato

“Mator aru bilahi logot hukan mass” is a popular small, dried fish based dish in Assam. This recipe is primarily prepared by the tribal communities in different parts of Assam.

● Ingredients:

- Dried small fishes-150g
- Pea – 500g
- Tomato- 150g
- Mustard oil – 60ml
- Onion sliced – ½ tablespoon
- Ginger paste – ½ tablespoon
- Garlic paste – ½ tablespoon
- Turmeric powder – ½ tablespoon
- Fish masala powder – ½ tablespoon
- Garam masala – ½ tablespoon
- Jeera powder – ½ tablespoon
- Dhania powder – ½ tablespoon
- Dhania Leaves as per required
- Red chilli powder – ½ tablespoon
- Salt as required

● Method of preparation:

- Wash peas, tomatoes and keep them aside.
- Heat oil in a pan and add sliced onion, ginger and garlic paste and sauté for a few minutes.
- Add tomatoes, peas and cook until the oil separates from the mix.
- Add turmeric powder, jeera powder, fish masala powder, chilli powder, dhania powder, garam masala, salt as required and saute for 2 minutes.
- Add dried small fishes and mix thoroughly.
- Add hot water and cook for 45 minutes.
- Add dhania leaves for garnishing.
- Serve hot with steamed rice.



2. Dried small fish chutney

“Hukan masor chutney” is the most popular dish in Assam using dried small fishes.

Ingredients:

- Dried small fishes - 50 g
- Tomato as per required
- Mustard Oil – 1-2 tablespoon
- Red/Green Chillies- 5-6
- Garlic paste – 1 teaspoon
- Onion- one medium size
- Salt as required
- Dhania leaves – one bunch



Method of preparation:

- Slowly roast the dried small fishes over low-medium heat for approximately 10-15 minutes.
- Turn off the heat when the fish has turned crispy and can easily be broken to pieces. Set it aside to cool.
- Roast the tomato for 10-15 minutes.
- Add roasted chillies or fresh chillies.
- Put all ingredients in a pestle/mixer grinder.
- Grind them all into a fine paste.
- Add salt to taste
- Add chopped dhania on top.
- Serve with hot steamed rice.

3. Dried small fish with Colocasia leaves, stem and tomato

“Kosu logot hukan mass” is very popular recipe among the tribal communities in Assam.



● Ingredients:

- Dried small fishes- 100g
- Colocasia leaves with stems- one bunch
- Tomato- 3-4 medium size
- Ginger paste – ½ tablespoon
- Garlic paste – ½ tablespoon
- Onion – one medium size
- Mustard Oil- 4-5 tablespoon
- Turmeric powder – ½ tablespoon
- Black pepper – ½ tablespoon
- Garam masala – ½ tablespoon

● Method of preparation:

- Soak dried small fishes in warm water for 5 minutes.
- Wash Colocasia leaves along with stems in running water and chop roughly.
- In a pan heat oil, add chopped onions, chillies, ginger-garlic paste, turmeric, required amount of salt and saute.
- Add chopped Colocasia leaves with stems and cook for 10-15 minutes in low flame.
- Add dried small fishes
- Add tomatoes
- Add 2-3 cups of water and cook for 15-20 minutes.
- Add black pepper powder and garam masala powder.
- Cook for 5 minutes in medium heat.
- Serve hot with steamed rice.

About WorldFish

WorldFish is a nonprofit research and innovation institution that creates, advances and translates scientific research on aquatic food systems into scalable solutions with transformational impact on human well-being and the environment. Our research data, evidence and insights shape better practices, policies and investment decisions for sustainable development in low- and middle-income countries.

We have a global presence across 20 countries in Asia, Africa and the Pacific with 460 staff of 30 nationalities deployed where the greatest sustainable development challenges can be addressed through holistic aquatic food systems solutions.

Our research and innovation work spans climate change, food security and nutrition, sustainable fisheries and aquaculture, the blue economy and ocean governance, One Health, genetics and AgriTech, and it integrates evidence and perspectives on gender, youth and social inclusion. Our approach empowers people for change over the long term: research excellence and engagement with national and international partners are at the heart of our efforts to set new agendas, build capacities and support better decision-making on the critical issues of our times.

WorldFish is part of One CGIAR, the world's largest agricultural innovation network.

For more information, please visit www.worldfishcenter.org