

## Potentials and problems of aquaculture in Bangladesh

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### Potentials

- **Food security** (Important food item -rice and fish as a culture; cheap source of animal protein-60%; hidden hunger, >55% of the total fish production; annual per capita fish intake of 23.00 kg against the requirement of 21.90 kg) (DoF, 2022)
- **Nutrition security** (source of multi nutrients; macro and micro nutrients; protein to building block; minerals and vitamins to disease prevention; omega 3 fatty acid to keep the health/heart good condition, malnutrition; under nutrition; child, lactating women and poor/extreme poor people)
- **Employment generation/livelihood development** (involvement of >12% people; producers, hatchery/nursery operators, fishers, GO-NGO officers/staff; public-private sectors)
- **Enterprise development** (series of actors; input traders-seed, feed, fertilizer, chemical, medicine; producers, processors, market players)
- **Utilization of the resources** (ponds, ditches, tanks, canals, rivers, floodplain, rice land etc.)
- **National income** (GDP- 3.57%; one-fourth of agricultural GDP, comparable Aquaculture GDP with other countries)
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- **Export earning** (fish, prawn, crab, frozen/processed food; 1.23% of the total export earning)

### Scope

- Use of water resources (ponds, ditches, tanks, canals, floodplain, rice field, river, *beel*, haor baor, sea);
- Involvement of available farmers/fishers;
- Involvement of unemployed youth available;
- Development of enterprises

## Problems

- **Lack of quality seed** (inbreeding)
- **Lack of low cost quality feed** (40-70% of the total cost, inappropriate protein level)
- **Lack of inducing agents** (PG, HCG, RHA, LH)
- **Water quality going bad** (low water depth, pH fluctuation, insufficient DO, high turbidity, harmful gas production)
- **Lack of region specific aquaculture** (variation in soil-water quality in different agro-ecological zones; recommendation of same package?)
- **Social problem** (multiple ownership; short term/poor owner-operator agreement for multiple/leased waterbody; poaching, poisoning; no easy access by the poor/extreme poor to waterbody specially to the public ponds/canals)
- **Economic problem** (credit/capital)

## Risks

- Unavailability of **inputs** in time
- Unavailability of **labour**
- **Price fall** of harvested fishes
- Natural **calamities** (drought, flood )
- Occurrence of **diseases/parasites**