STOCKING, FEEDING AND HARVESTING PRACTICES

STOCKING

Stocking refers to the release of fish seed into the culture system. The number and size of fish in ponds, tanks or cages is an important aspect of fish farming. Generally, the welfare of farmed animal in terms of **available space** for swimming, feeding e.t.c. have to be considered, vis-à-vis the size of fish or stage of development (either hatchling, fingerling, juvenile, sub-adult or adult) before stocking . Stock welfare is the major issue considered in determining stocking densities (i.e. number of fish per unit volume of water). Stocking in fish farming is synonymous with sowing in agriculture.

Farmed fish normally shoal or school together, however, under certain circumstances they may change their behaviour and start individually defending territories. These territories may be related to structures in the culture medium (pond, tank, cage e. t. c.) or to the source of food. In either case this can result in increased aggression and reduced access to feed, for at least some fish. There are many aspects of the fish's environment that affect the change from territorial to shoaling behaviour including: species and life stage, stocking density, the water velocity, water temperature and feeding system. However, in simple terms there may well be a lower limit to safe stocking density.

Fish health, welfare and productivity may suffer below certain stocking densities. Since fish do not normally occupy all the available space, overall stocking density (number of animals or biomass per unit volume) is not necessarily a good indication of what the fish experience, thus other indices of crowding or loading of the system is devised by practitioners. For tanks with water flowing through them these include **Carrying capacity, CC** (Kg of fish per litre of water per minute) or **Flow index** (Kg of fish per litre per minute per cm