Table 6. Types of formulated feed used, their advantages and disadvantages and the type of processing

Type of feed	Advantages	Disadvantages	Moisture (% max)	Processing techniques	
Farm-made feed					
Trash fish	Low cost depending on the location. No energy requirement. Pallatable.	Very expensive in some locations. Must be used immediately. High FCR. Negative environmental impact. Risk of spreading fish diseases. Source of pollution.		Chopped and minced trash fish	
Dry	No energy requirement (pellets can be made by hand with a meat mincer and then sun dried); vitamins preserved. Feeds available on site. Easy to make. Utilize local waste products. Dry feed lasts longer than moist feeds.	Starches not cooked and not very digestible; Low water stability (additional binder may be required);shorter storage period; High FCR; large surface required for drying. Moist feed can not be stored and must to be used immediately.	Dry pellet 10% and moist diet 30%	Wet dough extruded through a meat mincer and sun dried	Wet feed extruding line
Moist				Hand made dough	
Industrially manufactured pellet					
Sinking	Good water stability. Cheaper than floating pellets and so lower capital costs.	Dry ingredients required; vitamins partially lost. Generally higher FCR than floating pellet.Fish feeding can not be observed.	10%	Compressed pellet	Compressed pellet line
				Steam treated compressed pellet	Steam-treated compressed pellet line
Floating / slow sinking	Best water stability; best FCR; many anti-nutritional factors removed with heat.	Extruders more expensive and so high production cost. Requires more skill in production. Fish feeding can be observed.	10%	Extruded/Expanded pellet	Extruded/expanded pellet line
Microdiets					
Microbound				Powdered ingredients in a water stable matrix (e.g.: agar, carrageenan, calcium alginate, casein, zein)	
Microencapsulated		The protein membrane may be difficult to digest			