Table 9. Type of formulated feed used for tilapia culture with advantage and disadvantage and the type of processing

Type of feed	Advantages	Disadvantages	Moisture (% max)	Processing techniques	Links to additional infiormation
Farm-made feed					
Dry	No energy requirement (pellets may 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 last longer than moist feeds.	Starches not cooked and not well digestible; low water stability (additional binder may be required);shorter storage period; low FCRs; large surface required for drying. Moist feed can not be stored and need 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	Starches partially cooked; good digestibility and water stability (gelatinization improved by prior steam treatment). Cheaper than floating pellets and so lower capital costs.	Dry ingredients required; vitamins partially lost. Generally lower 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	Almost complete starch gelatinization; better digestibility and stability; better FCR; many anti-nutritional factors removed with the heat treatment. Fish feeding can be observed.	Extruders more expensive and so high production cost. Requires more skill in production.	10%	Extruded/expanded pellet	Extruded/expanded pellet line

See Bouvier and Brisset (2006) for further information