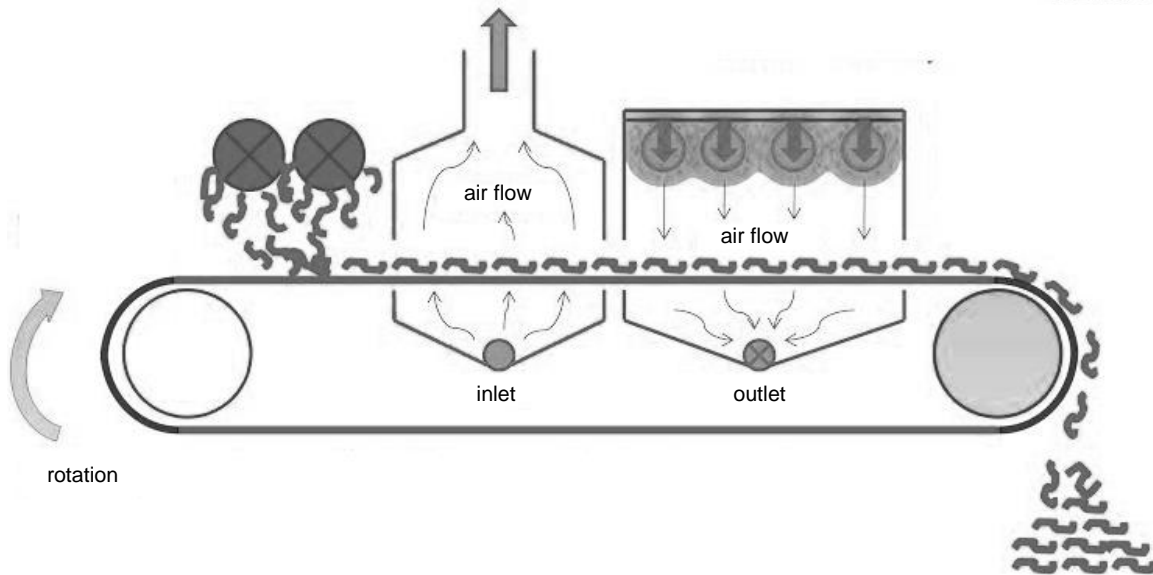


# Pelletizing



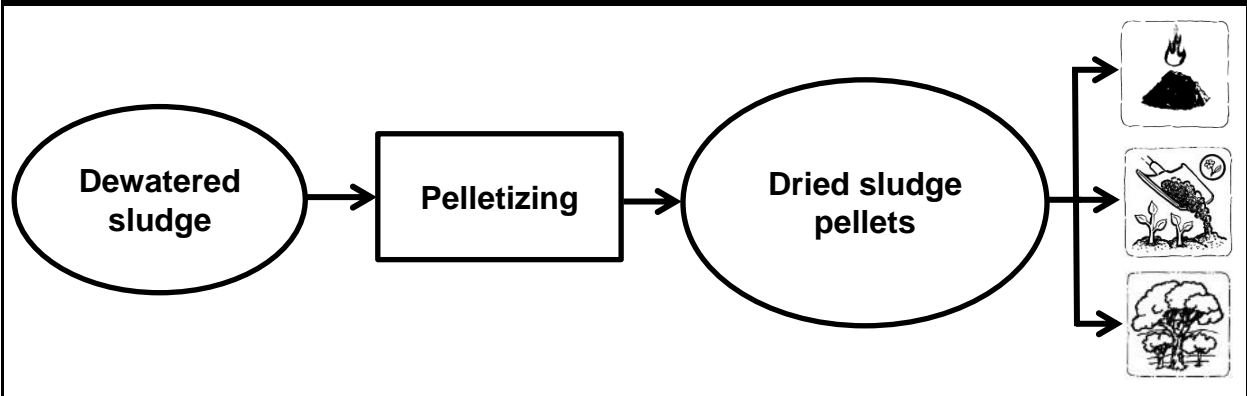
Pelletizing in the LaDePa technology in South Africa (Credit: Pollution Research Group)

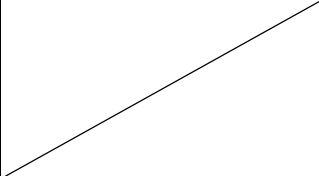



Pelletizers in Uganda and Ghana (Credit: Eawag-Sandec)

- **Design:** Dewatered sludge is processed into pellets by pressing it through a nozzle or plate. Pellets are dense, consistent in composition, and relatively easy to store, transport, and market.
- **Operation:** Pelletizing can be used to enhance drying, for example with the Bioburn process that can process pellets at 50% moisture, that can then dry to 90% without additional thermal energy. Other pelletizers dewater or dry sludge when they are combined with other technologies, such as a thermal dryer in the LaDePa technology. Other pelletizing technologies require that the sludge is first dried, and then compressed into pellets with a binder.
- **Time and energy required:** Pelletizing takes seconds and requires a low amount of energy, which varies among technologies.

## Treatment Technology Description



<b>Treatment Objectives</b>	Pathogen Inactivation	<b>Low to High</b>
	Dewatering	<b>Low</b>
	Stabilization/Nutrient Management	<b>No</b>
<b>Pathogen Inactivation</b>		<ul style="list-style-type: none"> <li>Pelletizing technologies alone do not inactivate pathogens, unless they are combined with another technology (for example, LaDePa).</li> </ul>
<b>Level of Development</b>		<ul style="list-style-type: none"> <li>Pelletizing technologies are transferred from animal feed or biomass fuel production. However, some pelletizers have innovative features (for example, they can pelletize wet faecal sludge).</li> <li>Proven experience in design, operation, and maintenance for faecal sludge treatment; however, there is not wide spread or full-scale implementation.</li> </ul>

**References**

Strande, L., Ronteltap, M. & Brdjanovic, D. (2014). *Faecal sludge management: Systems approach for implementation and operation*. London, UK: IWA Publishing. Retrieved from: [www.sandec.ch/fsm\\_book](http://www.sandec.ch/fsm_book)