

Drawbacks of composting include time, space, and money requirements; odor; the need for protection from rain; increased salinity; herbicide carryover; potential loss of nitrogen; and slow release of nutrients.

- Composting requires equipment, labor, and management. The initial investment may be low if existing farm equipment can be used. But if a lot of composting is done, it may be necessary to buy special equipment, which can be expensive.
- If a considerable amount of waste is composted, it can occupy a large area and might require a building to cover it in high-rainfall areas.
- Marketing takes time, and many producers do not want to deal with selling compost.
- Composted manure contains less nitrogen than fresh manure.
- As manure and wastes are composted and dried, the salt concentration of the mix can increase. Some plants are very sensitive to soil salinity and may be damaged by compost used as a fertilizer. Likewise, many herbicides in plant residues are not broken down in compost. Some persistent herbicide residues in compost can harm crops. If soils are already high in salts or you notice crop damage, seek advice from a local crop advisor.
- Most of the nutrients in compost must be mineralized in the soil before they are available to plants. Often less than 15% of the nitrogen is available in the first cropping season. This might be a problem if fields require a lot of nitrogen the first year. However, the nutrients will be there for future years.

Conclusion

Composting is a natural process that can be accelerated by proper management. The result is a stable, volume-reduced product that can be sold, applied to fields, or used as livestock bedding. The land area, type of equipment already available, market potential in the area, available labor, and many other factors play a role in determining the best composting system. Explore the different options and talk with others who are familiar with composting.

For More Information

Livestock Waste Facilities Handbook (3rd edition). MWPS-18. (1993) Ames, IA: MidWest Plan Service. <http://mwps.org>

On-Farm Composting Handbook. NRAES-54. (1992) Ithaca, NY: Plant and Life Sciences Publishing (formerly Northeast Regional Agricultural Engineering Service), Cornell University Cooperative Extension. <http://palspublishing.cals.cornell.edu/>

Oregon Department of Agriculture, Natural Resources Division
<http://oregon.gov/ODA/NRD/>

Oregon Department of Environmental Quality
Land quality, solid waste:
<http://www.deq.state.or.us/lq/sw/>
Regional offices:
<http://www.deq.state.or.us/about/locations.htm>

The Oregon State University Extension Catalog offers many publications on agriculture, livestock, animal waste management, and related topics. <http://extension.oregonstate.edu/catalog>