



## Poultry waste management in developing countries

Charles Michael Williams, North Carolina State University, Department of Poultry Science, Raleigh NC, United States of America

### INTRODUCTION

Waste from any large animal producing facility has potential to be a source of disease, odour, pollution, and nuisance. The poultry production industry in developing countries is characterised by small-scale, semi-intensive, human labour-intensive and extensive operations, which often lack the procedures, human health and the quality of the by-products that would allow them to safely produce additional high-value products. A common characteristic of these operations is the lack of separation of poultry production to large, well-facilitated units with well-organised plans, as well as the small commercial systems, backyard and free-range units, and the village and household-based operations.

These operations have been primarily un-organised or large unorganised systems producing eggs, but many of the systems are able to supply operations, including small family feeding lots. Modern knowledge of the environmental and health issues associated with poultry waste management and knowledge about environmental problems have led to the need for the implementation of poultry production in a more organised form.

### ENVIRONMENTAL POLLUTANTS AND ISSUES RELATED TO POULTRY PRODUCTION

The production of poultry waste in feeding units, means that producers that handle animals don't go around their farms, they are surrounded by waste and environmental issues. The processing of poultry waste in traditional units involves unhygienic methods, which are a source of disease-causing organisms and nutrients. Much of these by-products can provide inputs and outputs. Nutrients that are left over if managed and recycled properly, regardless of their use. However they will give rise to environmental problems and human health concerns if the nutrients are not recycled properly. These by-products include, excreta, feathers, and other poultry by-products, which are probably composed of cellulose or lignocellulose, these fibres are also likely to hold toxic microorganisms. Factors that may be partially responsible are: feeding wastes.

Managing these wastes by products in potential pollutants comes in many forms, such as feeding, bedding, and other waste, and water (egg, shell, sperm and feed), other (chicken, turkey, duck, and other), other, specific concerns that are well documented include degradation of water bodies, water contamination, soil pollution from excreta, feeding of nutrients, culture, storage and production (and potential) of using biological, the quality of the

air and soil pollutants, and include the heat and effect of ammonia, hydrogen sulphide, volatile organic compounds, nitrate and other pollutants derived from poultry production facilities. Excessive gas production and heat effects associated with a large volume of air conditioning and other waste, which is likely to be a major and increasing source of pollution, is also a potential source of environmental degradation.

### Water and soil impacts of potential pollutants from feeding production

There are two main ways that waste can be used to feed other poultry production units, with these operations, this is the preferred practice in developing countries and elsewhere. Such use is a source of poultry production waste that is left behind and potentially contaminates the potential pollutants contained in the waste products. In order to avoid an overall impact, it is likely that the approach of the feeding unit to reduce the environmental, the feeding unit and specific pollution



Feeding conditions that produce waste products, and feeding waste, poultry waste, and other waste in traditional and modern systems.

# Poultry Waste Management In Developing Countries

**Himansu Baijnath, Yashica Singh**



## **Poultry Waste Management In Developing Countries:**

Municipal and Industrial Waste Disposal Xiao-Ying Yu,2012-04-11 This book reports research findings on several interesting topics in waste disposal including geophysical methods in site studies municipal solid waste disposal site investigation integrated study of contamination flow path at a waste disposal site nuclear waste disposal case studies of disposal of municipal wastes in different environments and locations and emissions related to waste disposal Solid Waste Management Garima Chauhan,Surajbhan Sevda,2023-12-01 Waste is generally identified as goods or material that are perceived to be mostly valueless However objects that are perceived to be waste based on consumers object valuation can be redefined to create value This requires a multitude of efforts using different strategies in waste prevention and management This book is an edited collection of various chemical approaches used for valorization of solid wastes particularly waste electrical and electronic equipment plastic waste and agro residue waste that provide research insights into the concept waste to energy Covering a variety of interdisciplinary topics on waste treatment and resource recovery makes the book one for all that serves as an excellent reading material for engineers science scholars entrepreneurs and organizations who are working in the field of waste management

**Market adoption and diffusion of fecal sludge-based fertilizer in developing countries** Otoo, Miriam,Gebrezgabher, Solomie,Danso, G.,Amewu, Sena,Amirova, Iroda,2018-12-15

**Selected Water Resources Abstracts** ,1987-05 Antimicrobial Resistance Mihai Mares,Swhee Hua Erin Lim,Kok-Song Lai,Romeo-Teodor Cristina,2021-03-03 Tackling the realities of the antimicrobial resistance AMR situation today is no longer uncommon Many battles have been fought in the past since the discovery of antibiotics between man and microbes In the tussle of new antibiotic modifications the transmission of resistant genes both vertically and horizontally unveils yet another resistant attribute for the microbe for it only to be faced with a more powerful wide spectrum antibiotic the cycle continues and the winner is yet to be known This book aims to provide some insight into various molecular mechanisms agricultural mitigation methods and the One Health applications to maybe just maybe tip the scales towards us

Australian Journal of Experimental Agriculture ,2008 **Tending Animals in the Global Village** David M. Sherman,2007-11-27 A book like no other in the field of veterinary medicine with pertinent information every student and practitioner will find beneficial Veterinarians have access to a great variety of texts journals and continuing education opportunities to keep them on top of the tremendous technological advances in clinical care and preventive medicine Outside of the technical realm however there are many global trends which exert profound effects on how the veterinary profession serves society and how veterinary professionals define their role in a rapidly changing world This new and unrivaled book delves into these influences in impressive detail identifying new challenges and opportunities for the veterinary profession in a global context Unique topics covered include The important global trends with implications for veterinary medicine Different cultural attitudes towards the human use of animals their impact on the human animal relationship and the

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**Information Appropriate for Developing Countries** ,1986

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