

Plant Science

1. **Effects of different fertilizers on crop growth**
2. **Optimizing planting density for maximum yield**
3. **Comparative study of organic vs. conventional farming methods**
4. **Investigating the impact of light spectrum on plant growth**
5. **Testing the effectiveness of natural pesticides**

Animal Science

6. **Nutritional requirements of different livestock**
7. **Effect of different bedding materials on animal health**
8. **Breeding strategies for enhancing milk or meat production**
9. **Impact of exercise on animal growth**
10. **Stress levels in animals due to various handling techniques**

Soil Science

11. **Soil erosion prevention methods**
12. **Nutrient retention in different soil types**
13. **Comparing soil quality in organic vs. conventional farms**
14. **Effect of tillage practices on soil structure**
15. **Bioremediation of contaminated soils**

Agricultural Economics

16. **Cost-benefit analysis of adopting precision agriculture**
17. **Market analysis for a specific crop or livestock product**
18. **Economic impact of climate change on agriculture**
19. **Study of agricultural subsidies and their effects**
20. **Farm diversification strategies**

Agricultural Engineering

21. **Design and testing of a low-cost irrigation system**
22. **Automation of farm processes using IoT**
23. **Energy efficiency in agricultural operations**
24. **Development of a sustainable packaging solution for farm products**
25. **Robotic solutions for harvesting or planting**

Food Science

26. **Effect of cooking methods on nutrient retention in vegetables**

- 27. Food preservation techniques and their effectiveness
- 28. Consumer preference for organic vs. conventional foods
- 29. Food safety measures in farm-to-table supply chains
- 30. Testing the shelf-life of different food products

Aquaculture

- 31. Optimal feeding strategies for fish farming
- 32. Water quality management in aquaculture
- 33. Comparative study of different fish species growth rates
- 34. Aquaponics system design and efficiency
- 35. Disease prevention in aquaculture

Renewable Energy in Agriculture

- 36. Biogas production from agricultural waste
- 37. Solar energy applications in farming
- 38. Wind energy potential on farms
- 39. Hydroponic farming powered by renewable energy
- 40. Efficiency of biodiesel from farm-grown crops

Genetics and Biotechnology

- 41. Genetic modification for crop disease resistance
- 42. Cloning and its potential applications in agriculture
- 43. Genomic selection in livestock breeding
- 44. CRISPR technology in agriculture
- 45. Biofortification of crops for improved nutrition

Environmental Impact

- 46. Carbon footprint of different agricultural practices
- 47. Water usage efficiency in farming
- 48. Biodiversity conservation on agricultural lands
- 49. Impact of pesticides and herbicides on ecosystems
- 50. Mitigation strategies for agricultural pollution

Urban Agriculture

- 51. Vertical farming feasibility in urban areas
- 52. Community gardening impact on local food security
- 53. Rooftop gardening for urban food production
- 54. Hydroponic systems in urban settings
- 55. Waste recycling in urban agriculture

Climate Change and Agriculture

- 56. **Adaptation strategies for farming in changing climates**
- 57. **Carbon sequestration in agricultural soils**
- 58. **Effect of temperature changes on crop yields**
- 59. **Resilience of livestock breeds to climate variability**
- 60. **Role of agriculture in mitigating climate change**

Precision Agriculture

- 61. **Use of drones in monitoring crop health**
- 62. **GIS mapping for precision agriculture**
- 63. **Sensor technology for soil moisture monitoring**
- 64. **Big data analytics in farming decisions**
- 65. **Variable rate technology for fertilizer application**

Horticulture

- 66. **Hybridization techniques in flower breeding**
- 67. **Indoor gardening for ornamental plants**
- 68. **Medicinal plant cultivation and its therapeutic potential**
- 69. **Water conservation in landscape horticulture**
- 70. **Pruning techniques for fruit tree productivity**

Farm Management

- 71. **Farm succession planning**
- 72. **Risk management strategies for farmers**
- 73. **Labor efficiency on farms**
- 74. **Farm record-keeping systems**
- 75. **Impact of global markets on local farm economies**

Agricultural Policy

- 76. **Analysis of government subsidies on crop prices**
- 77. **Impact of trade policies on agricultural exports**
- 78. **Regulatory impacts on small-scale vs. large-scale farms**
- 79. **Policy implications of genetically modified organisms**
- 80. **Comparative study of agricultural policies across different countries**

Education and Extension

- 81. **Developing agricultural education programs for schools**
- 82. **Extension outreach strategies for rural communities**

83. **Interactive farm tours for educational purposes**
84. **Use of virtual reality in agricultural education**
85. **Training programs for sustainable farming practices**

Rural Development

86. **Role of agriculture in rural economic development**
87. **Infrastructure improvements for rural farming communities**
88. **Microfinance initiatives for smallholder farmers**
89. **Access to technology in remote farming regions**
90. **Community-supported agriculture models**

Agribusiness

91. **Startup opportunities in agricultural technology**
92. **Supply chain management in agribusiness**
93. **Marketing strategies for farm products**
94. **E-commerce platforms for agricultural sales**
95. **Financial analysis of agricultural investments**

Food Security

96. **Role of urban agriculture in food security**
97. **Emergency food relief systems**
98. **Sustainable food production for vulnerable populations**
99. **Impact of climate change on global food security**
100. **Food sovereignty and its implications**

Sustainable Agriculture

101. **Certification programs for sustainable farming**
102. **Agroecology principles in farming systems**
103. **Circular economy in agriculture**
104. **Permaculture design for sustainable landscapes**
105. **Regenerative agriculture practices**

Agricultural Communications

106. **Social media strategies for agricultural outreach**
107. **Creating educational videos for farmers**
108. **Podcasting about agricultural innovations**
109. **Writing agricultural articles for newspapers/magazines**
110. **Public relations campaigns for agricultural organizations**

Livestock Management

- 111. **Animal welfare standards in intensive farming**
- 112. **Feeding strategies to reduce methane emissions**
- 113. **Genetic diversity conservation in livestock breeds**
- 114. **Health management in free-range vs. confined livestock**
- 115. **Waste management in intensive livestock farming**

Aquaponics and Hydroponics

- 116. **Comparative study of aquaponics vs. hydroponics**
- 117. **Nutrient cycling in aquaponic systems**
- 118. **Water quality parameters for aquaponic fish**
- 119. **Hydroponic nutrient solutions for optimal plant growth**
- 120. **Automated control systems for aquaponic farms**

Agroforestry

- 121. **Designing agroforestry systems for biodiversity**
- 122. **Carbon sequestration potential of agroforestry**
- 123. **Agroforestry models for climate resilience**
- 124. **Nutrient cycling in agroforestry systems**
- 125. **Market analysis of agroforestry products**

Post-Harvest Technology

- 126. **Storage techniques for extending shelf life**
- 127. **Value-added processing of agricultural products**
- 128. **Quality assessment of stored grains**
- 129. **Cold chain management for perishable goods**
- 130. **Packaging innovations for fresh produce**

Agricultural Biotechnology

- 131. **Development of genetically modified crops**
- 132. **Bioinformatics in agricultural research**
- 133. **Bioreactor systems for plant tissue culture**
- 134. **Genetic markers for disease resistance in crops**
- 135. **Biopharmaceutical production in plants**

Urban Farming

- 136. **Aquaponics in urban environments**
- 137. **Rooftop gardening for vegetables**

- 138. **Vertical farming systems**
- 139. **Community gardens in urban settings**
- 140. **Hydroponic setups in small spaces**

Organic Farming

- 141. **Soil fertility management in organic farming**
- 142. **Pest and disease management without chemicals**
- 143. **Certification processes for organic products**
- 144. **Consumer preferences for organic vs. conventional foods**
- 145. **Economic viability of organic farming**

Agricultural Robotics

- 146. **Autonomous tractors for field operations**
- 147. **Robotic harvesting systems**
- 148. **Drones for crop monitoring**
- 149. **Weed control robots**
- 150. **AI applications in precision agriculture**

Sustainable Fisheries

- 151. **Aquaculture systems for sustainable seafood**
- 152. **Marine conservation and fishing practices**
- 153. **Fisheries management for biodiversity**
- 154. **Impact of climate change on marine ecosystems**
- 155. **Economic analysis of sustainable fishing practices**

Agricultural Education

- 156. **Development of agricultural curriculum**
- 157. **Hands-on learning activities for students**
- 158. **Agricultural career exploration**
- 159. **Educational farm tours**
- 160. **Online resources for agricultural education**

Soil Health

- 161. **Cover cropping for soil improvement**
- 162. **No-till farming techniques**
- 163. **Soil microbiome and plant health**
- 164. **Biochar applications in agriculture**
- 165. **Soil testing and nutrient management**

Agrotourism

- 166. **Farm-to-table experiences**
- 167. **Educational farm visits**
- 168. **Farm stays and rural tourism**
- 169. **Agricultural festivals and events**
- 170. **Culinary tours focused on local agriculture**