Sustainable agriculture aims to meet current food, fuel, and fiber needs without jeopardizing future production. It prioritizes holistic farm systems, focusing on profitability, environmental stewardship, and improved quality of life. Key practices include diverse cropping, reduced chemical inputs, conservation tillage, and ecological pest management, all enhancing soil health, water conservation, and biodiversity. Social sustainability emphasizes farmer well–being, community engagement, and equitable access to .resources. Economic viability is achieved through efficient resource use and diversified operations