



Slated Goat Rearing - A Movable Wealth

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Abstract

In recent years, the concept of sustainable agriculture has gained significant momentum as the world seeks to address food security, environmental conservation, and economic viability. One innovative practice that exemplifies this approach is the integration of slated goat rearing within coconut gardens. This harmonious combination presents a unique opportunity to optimize land use, diversify income streams, and promote ecological balance. The benefits and considerations of slated goat rearing in coconut gardens, highlighting its potential to contribute to a more sustainable and resilient agricultural landscape.

Introduction

The practice of integrating livestock rearing with agriculture has gained significant attention in recent years due to its potential to enhance farm productivity, optimize resource utilization, and promote sustainable land management. One such innovative approach involves the incorporation of slated goat rearing within coconut gardens, creating a harmonious and mutually beneficial relationship between plant and animal systems. This integration not only holds the promise of diversified income streams for farmers but also contributes to ecological balance and soil fertility improvement.

Coconut gardens, renowned for their economic significance and ecological importance, offer an ideal backdrop for experimenting with such holistic farming approaches. By introducing slated goat rearing – the practice of allowing goats to graze on vegetation remnants and cover crops in agricultural settings – farmers can unlock a plethora of benefits that extend beyond mere livestock production. Animal component Goat is often renowned as “Poor man’s cow”, “Moveable Wealth, ATM and Blank Cheque” and is highly suitable for semi-intensive and extensive systems of management.

Ecological benefits

The integration of goat rearing in coconut gardens offers numerous ecological advantages. Coconuts are known for their extensive root systems that help stabilize the soil and prevent erosion. When goats are introduced into these spaces, their grazing activities naturally reduce the undergrowth, minimizing competition for nutrients and sunlight among the coconut



trees. This controlled grazing helps maintain a healthier coconut grove by eliminating invasive plants that could otherwise harm the trees.

Furthermore, goat manure acts as an excellent natural fertilizer, enhancing soil fertility. As goats roam and graze, they naturally enrich the soil with their droppings, which contain essential nutrients that promote plant growth. This synergy between goats and coconut trees creates a harmonious ecosystem where both species thrive together.

Weed and pest Management

Coconut gardens often face challenges from weeds and pests that can hinder tree growth and overall productivity. Slated goat rearing presents a sustainable solution to these challenges. Goats have an innate ability to consume a variety of plant materials, including weeds that might otherwise compete with coconut trees for resources. Their presence helps mitigate weed growth, reducing the need for synthetic herbicides and minimizing the negative environmental impact associated with chemical weed control.

Moreover, goats can assist in controlling certain insect pests that might infest coconut trees. Their browsing behavior can disrupt the life cycles of harmful insects, thus decreasing the need for chemical pesticides and preserving the ecological balance within the coconut garden.

Economic benefit

The economic advantages of integrating slated goat rearing in coconut gardens are substantial. Firstly, this approach diversifies the income streams of farmers. Instead of relying solely on coconut production, farmers can generate additional revenue through the sale of goat meat, milk, and other related products. This diversification enhances the financial resilience of farmers, reducing their vulnerability to market fluctuations in any one sector.

Secondly, the goat manure produced during this process can be used as a valuable organic fertilizer. By reducing the dependency on synthetic fertilizers, farmers can lower their input costs while maintaining soil health and crop quality. This cycle of natural nutrient enrichment ultimately contributes to more sustainable and cost-effective agricultural practices.

Social benefit

The practice of slated goat rearing in coconut gardens can also have positive social implications. It provides employment opportunities for local communities, particularly in rural areas where traditional farming practices are prevalent. This integration creates jobs related to goat care, feeding, and marketing of goat products. Additionally, it fosters knowledge exchange among farmers, encouraging the sharing of innovative techniques and best practices within the agricultural community.



Slatted Goat shed

Slatted Goat Shed is recently gaining momentum because goats enjoy a very salubrious atmosphere in the shed, as urine and faecal pellets are drained down, paving way for their better breeding ability. Ventilation Shed should be well aerated and ventilated to maintain goats in a hygienic atmosphere. It is also essential for maintaining the temperature for air flow. Added advantage of this shed is the presence of compartments which helps isolate the sick, weak and pregnant goats. Goat shed can be disinfected with 3- 4 % KMnO₄ solution at fortnightly intervals to prevent the spread of diseases.

Orientation to facilitate intrusion of solar radiation, East– West orientation of goat shed is considered as the best. Elevated goat shed offers protection for goats from damp conditions, crawlers and reptiles. Shed should be 20 feet wide of any convenient length. An adult male goat weighs about 110-115 kgs and a female goat weigh about 90-100 kgs. Feeding Goats respond very well to well balanced and nutritious feed. For successful growth and reproduction, it requires 12-18 % protein. A perfect blend of proteinaceous and non-proteinaceous feed and fodder facilitates the goats in weight gain, disease resistance and in parturition.

Prospects of Goat Farming Goats are multipurpose, versatile animals which produce milk, meat, fiber and skin together, which can be reared easily with less space, less demand of housing and other management with relatively low initial investment. Production costs like infrastructure, feeding and treatment are less. Goats can adapt themselves to diverse agroclimatic conditions and to changing weather scenario. Goats are prolific breeders and achieve sexual maturity at the age of 10-12 months. Gestation period of goats is short and at the age of 16-17 months they start yielding milk. Diseases are less common in goats and doesn't require expensive veterinary aid. Goat products have wide acceptance throughout the world without any social forbidden.

Economics of Goat Farming (Per year for a flock of (6+1) goats) One acre of coconut garden can support 15- 20 goats. Initially the investment can be started with (6+1) goats and as the flock reaches a threshold of 15-20, surplus can be sold. Cumbu Napier hybrid cultivated over one acre can yield a green fodder of 15 - 20 tonnes per annum. Fodder yield of Desmanthus over one acre is 10-15 tonnes per annum. Besides, a good amount of feed can be generated from Glyricidia, Agathi, and Moringa raised on the borders and edges. As one acre of coconut garden can support 20 goats, it is possible to generate a net annual revenue of Rs. 4.78 lakhs through goat farming alone.



Conclusion

The integration of stale goat rearing in coconut gardens presents a promising avenue for sustainable agricultural development. It combines the benefits of livestock production with ecological stewardship, offering farmers an opportunity to optimize land use, enhance resource efficiency, and secure livelihoods. As we embark on this exploration of an innovative farming paradigm, it is essential to consider the diverse dimensions of this approach and pave the way for a more resilient and regenerative agricultural future.

The synergy between slated goat rearing and coconut gardens showcases an innovative approach to sustainable agriculture. Through enhanced soil health, weed and pest management, economic diversification, and positive social impacts, this integrated practice demonstrates how harmonizing natural processes can yield benefits for both the environment and local communities. As we navigate the challenges of a changing world, such holistic approaches hold the promise of resilient and thriving agricultural systems.