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# Organic livestock management: a comprehensive guide to sustainable rural business management through holistic herding

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**Abstract:** Organic livestock management practices could be a sustainable future weapon of rural business development and management. This paper focuses on providing a comprehensive guideline through which may help the organic farm researchers to develop more improved strategies or methods for sustainable livestock farming. It is expected that it may guide rural economy to get flourished through sustainable livestock management practices.

Key Words: Organic livestock management, Sustainable livestock farming, Rural Business Development and management

# **1. INTRODUCTION:**

Multiple aspects of scientific organic livestock farming management should be emphasized as key guide for enhanced rural business management practices as follows:

# **Organic Livestock Health Management Practices:**

It focuses on the well-being of animals, environmental stewardship and consumer health and wellness. Natural, holistic approaches are highly prioritized for promoting animal welfare along with reducing the use of synthetic chemicals and medications. Some key aspects are discussed as follows-

**1. Pasture access and grazing:** Animals are provided with access to pasture in organic livestock management. Their physical and mental well-being are looked after through engaging them in natural behaviours such as grazing. Diverse forage options, exposure to sunlight and fresh air etc. are included in pasture-based system. So it contributes a lot to overall health of livestock.

**2. Species-appropriate Diets:** Such diets consist of organic forage and feed. Particular livestock are provided with particular diets. Ruminants (e.g. cattle, sheep) are offered grass-based diets. Besides poultry birds, pigs are provided with organically grown grains and legumes. These feed sources ensure appropriate nutritional balance.

**3. Preventive Healthcare:** This is considered as integral part of organic livestock health management. Overuse of antibiotics or synthetic medications are strictly prohibited. Multiple practices such as rotational grazing and maintenance of high quality hygiene help in prevention of diseases. These are applied as strategic parasite control measures. There is vaccination against common diseases too.

**4. Natural Remedies:** Integration of natural remedies is often noticed in organic livestock health management practices. Organic livestock producers prefer to apply such natural remedies. Herbal supplements, homeopathic treatments, essential oils are used to stimulate immunity, digestion along with management of minor ailments. Such alternatives reduce over dependence on synthetic drugs and promote holistic animal health.

**5. Regular Monitoring:** Trained veterinarians are engaged for routine health assessments for early detection of illness or any other physical discomfort. Timely necessary intervention and treatment can help in maintaining optimal animal welfare along with quick prevention of disease spread within herds or flocks.

**6. Stress Reduction:** Minimization of stressors is truly important. Providing adequate space, proper handling help in reducing stress levels. Ensuring comfortable living conditions can enhance the overall health quality and productivity of the livestock.



**7. Genetic Selection:** Suitable breed or strain selection has immense importance. Breeds having traits of resilience and disease resistance are given special emphasis. This is mainly considered that the selected strains can adapt to organic systems or not. These specific traits are highly prioritized as because they minimize the need for medical interventions. Breeding programs focuses on sustainable organic livestock production through improvement of overall health and productivity.

**8. Biodiversity Measures:** Prevention of disease introduction and spread are especially cared within organic livestock operations. So strict bio security protocols are implemented for this crucial purpose. Multiple effective measures including disinfection, controlling access, quarantine etc. may help in reducing the risk of disease transmission. These act as potential safeguards for animal and human health.

**9. Holistic Management:** Interconnectedness of soil health, plant nutrition and animal welfare are mainly considered in organic livestock management. Enhancement of biodiversity along with improved soil fertility is such regenerative practice having vital contributions to sustainable livestock farming systems. Promotion of natural ecosystem functions is also included too.

**10. Education and training:** Well trained farmers and farm workers having adequate farm education are considered more effective for proper implementation of organic livestock management practices. It's expected that they are thoroughly updated regarding animal health, nutrition and management techniques. It facilitates the integrity of organic livestock production systems.

So it is to be said that integrated pasture-based systems, species-specific diets, preventive healthcare initiatives and natural remedies are the particular measures through which organic producers can easily create resilient farming systems. Besides, consumers would be highly benefited by getting such nutritious products.

# **Organic Livestock Housing and Welfare Standards**

Organic Livestock Housing and Welfare Standards are vitally integral components of organic farming practices. Both emphasize the animal welfare along with sustainable farming systems. A broad overview of these standards is elaborated below-

**1. Animal Welfare Focus:** Promotion of natural behaviours and stress reduction of animals are prioritized in organic livestock management. The livestock are provided with wide outdoor access for grazing and exercise. Besides, provision of suitable shelter and living conditions are ensured by organic standards for fulfilling the physiological and behavioural needs of the animals. So overall animal welfare could be achieved in ease.

**2. Outdoor Access:** Providing animals with access to outdoor areas is included into key principles of organic livestock housing. They are allowed to engage in natural behaviours i.e. grazing, foraging and social interaction. Minimum requirements for outdoor access are also specified in organic standards. It ensures adequate space and pasture for freely roaming and exercising.

**3. Space and Comfort:** The comfort and well-being of animals are highly prioritized in organic livestock housing standards. Sufficient space is essentially required for animals for roaming around comfortably, taking rest and showing natural behaviours. Animal comfort and hygiene are also considered. So bedding materials such as straw or wood shavings are often used too.

**4. Natural Light and Ventilation:** We know that adequate presence of natural light and ventilation creates a healthy and comfortable environment for animals. Natural light is highly required for promotion of animals' circadian rhythms and overall well-being. Further, adequate ventilation helps in regulating temperature and humidity levels. It also minimizes the precarious risk of heat stress and respiratory problems. So organic livestock housing facilities are solely designed to expand natural light and ventilation to offer restful habitat.

**5. Nutrition and Feed:** Organic livestock are provided with a specific diet comprising of organic feed ingredients. So such feed are free from chemical pesticides, fertilizers and Genetically Modified Organisms (GMOs) for maintaining organic livestock standards. Sufficient access to pasture and forage is extensively encouraged for promoting natural grazing behaviour of livestock. Key priority is given to supplement the animals' diet with fresh nutritious vegetation.

**6. Health and Veterinary Care:** Preventive healthcare measure is the focus area of organic livestock farming. It emphasizes improvement of animal health along with minimizing the need for excessive veterinary interventions. Organic standards play a major role in promotion of holistic approaches to disease prevention and management. The routine uses of antibiotics and growth hormones are strictly prohibited. Veterinarians provide care and treatment as and when required while complying with organic principles.

In summary, there is no doubt that organic livestock housing and welfare standards fully emphasize animal welfare promoting their health, comfort and natural behaviours. Various aspects of housing design, outdoor access, nutrition and veterinary care are encompassed here. The main focus is to create sustainable farming systems for promoting animal welfare along with environmental stewardship. Adherence of organic livestock farming practices to strict ethical and



environmental standards is truly essential. So certification and regular inspections are initiated for monitoring the exact status regarding maintenance of organic regulations.

#### **Organic Livestock Nutrition Requirements**

We can't deny that the health, welfare and productivity of animals raised under organic farming practices could be ensured through organic livestock nutrition requirements. Organic livestock production and management focus on pure natural, holistic approaches to animal nutrition. So it differs from conventional livestock farming. Conventional farming method often depends on synthetic additives and medications. Let's delve in a broad overview of the key aspects and principles of organic livestock nutrition as follows-

**1.** Access to Organic Feed: Organic livestock must have access to chemical free organic feed. Those feed must avoid synthetic pesticides, fertilizers, Genetically Modified Organisms (GMOs) and other prohibited substances. The ingredients of organic feed i.e. variety of grains, forges and supplements have the capacity for fulfilling major nutritional requirements of multiple species.

**2. Forage-based Diet:** Organic pasture or forage-based diet is truly necessary for nurturing organic ruminants. It ensures improvement in their natural behaviours and promotes overall animal welfare.

**3. Balanced Nutrition:** A well formulated and balanced nutritious diet is primly required for nurturing organic livestock. Such diet must contain essential nutrients (e.g. protein, carbohydrates, fats, vitamins and minerals) in appropriate amounts. One thing to be mentioned here that such nutrient requirements vary depending on some specific factors i.e. age, breed, species, and reproductive status and production targets of the livestock.

**4. Supplemental Feeding:** Pasture and forage are not always sufficient to meet the nutritional needs of organic livestock. So supplemental feeding is truly required especially during the periods of limited grazing and nutrient deficiencies. It should be kept in mind that nutritional supplements must comply with organic standards and regulations. Those may include organic grains, minerals, vitamins and protein sources.

**5.** Avoidance of Synthetic Additives: Application of synthetic additives including antibiotics, hormones, growth promoters and synthetic vitamins etc. are strictly prohibited in organic livestock nutrition. Multiple herbal remedies, pre-biotics and organic micronutrient sources are emphasized instead of synthetic or chemical sources for supporting animal health and performance.

**6. Prevention of Nutritional Disorders:** The risk of nutritional disorders such as metabolic imbalances, deficiencies and toxicities should be minimized for maintaining quality health of organic livestock. So the livestock producers focus on careful diet formulation, regular monitoring of animal health and providing appropriate veterinary care as and when needed. Because proper preventive measures should be employed to combat the risks of nutritional disorders.

**7. Water Quality:** Adequate access to clean and fresh water is vital for hydration. Organic livestock health management can't be within reach without good quality hygienic water accessibility. Organic standards require confirmation from the producers or farm practitioners if the water sources are fully free from any harmful contamination and pollutants or not. Because some water contaminations could adversely affect animal health and these may bring several fatal diseases too.

**8. Environmental Sustainability:** Ecosystem resilience and resource efficiency become enriched through organic livestock production practices. Because such practices include promotion of diverse forage crops, rotational grazing systems, nutrient cycle etc. These have vital contributions to foster environmental sustainability.

**9. Certification and Compliance:** Thorough documentation of feeding practices, sourcing organic feed and supplements and monitoring detailed records of animal health and nutrition management is mandatory to undergo strict certification process. There are regular inspections for verifying compliance with organic regulations.

**10. Continuous Improvement:** Organic livestock nutrition is such a dynamic field that continuously grows with advances in research, technology and best practices. Organic producers are encouraged to be involved with ongoing education and collaboration for improving environmental sustainability. Besides, enhanced animal welfare and upgraded nutritional quality of organic products are fully prioritized.

So we notice that natural, holistic and sustainable approaches are solely accentuated for feeding and managing animals. Organic producers aim at creating healthier and more resilient food system that would fulfil necessary nutritional requirements of both animals and consumers. So, access to organic feed, well balanced nutrition, preventive health care and environmental conservation are primly emphasized.

#### 2. DISCUSSION :

**Organic Livestock Farming Principles and Practices:** 



If we follow the principles and practices of organic livestock farming management, we may notice that environmental sustainability, high quality chemical-free production and animal welfare are highly prioritized. Some key principles and practices of organic livestock farming are discussed as follows-

**1. Animal Welfare:** Organic livestock farming gives full focus on animal well-being. It aims at proper human treatment of animals or livestock to ensure that they are offered adequate space, safe shelter and access to pure natural environments or not. Organically raised animals are encouraged for showing their natural behaviours (e.g. grazing, foraging and socializing). It helps in improving their overall well-being.

**2. Chemical-free feed and forage:** We know that Organic farming promotes soil health, biodiversity. It promotes natural nutrient cycling too. So such sustainable farming practices raise healthy organic feed ensuring quality health and vigour of the livestock.

**3. Pasture-based Systems:** These are often utilized in organic livestock farming practices allowing animals for exposure in open pasture and rotational grazing systems. This system is much more helpful in reducing the need for intensive confinement and supplemental feed. So it promotes animal health and nutrition along with enhancing soil fertility.

**4. Preventive Healthcare:** Organic livestock farmers don't rely on chemical interventions for animal health management. They adopt different practices including vaccination, parasite management and biosecurity protocols for preventing disease outbreaks. They focus on preventive healthcare measures for reducing the use of synthetic medications along with antibiotics, hormones.

**5. Natural Breeding and Genetics:** Organic livestock farmers rely on natural breeding and selection methods. Because this is the purest way for maintaining genetic diversity and reliance within animal populations. Multiple desirable traits (e.g. disease resistance, adaptability, productivity) are prioritized for selection of animals in breeding programs. These are considered under organic management system.

**6. Environmental Stewardship:** There is also another beneficial outcome i.e. promotion of environmental stewardship. It has a major role in minimization of pollution and conservation of natural resources. Besides there is reduction in greenhouse gas emissions too. Enhancement of soil fertility, water quality and ecosystem health is highly prioritized through applications of some sustainable practices such as agro forestry, composting, manure management etc.

7. Integrated Pest Management (IPM): This strategy is employed by organic livestock farmers for controlling pests and diseases without any synthetic or chemical treatments. Multiple practices including crop rotation, biological controls, habitat manipulation and cultural practices are applied to promote natural pest control through reducing pest pressure.

**8. Certification and Standards Compliance:** Organic livestock practitioners should adhere to organic production standards. Strict certification regulations are established by organic certifying bodies and government practitioners must emphasize regular inspections and maintenance of detailed records for ensuring compliance with organic livestock farming practices.

**9. Traceability and Transparency:** Both are prioritized throughout the production process. Accurate records of necessary inputs, production practices and animal health management are thoroughly maintained by organic farmers for ensuring the consumers about integrity and authenticity of organic products.

**10. Continuous Improvement and Innovation:** Organic livestock farm practitioners are relentlessly committed to optimum Improvement and innovation in farming practices, research and modern technology adoption. New methods, technologies and best practices are given sole concentration for enhancing productivity, profitability and prolonged sustainability. Besides they give well emphasis on maintaining organic integrity and environmental stewardship.

In summary it is to be said that a holistic approach is embodied to agriculture through organic livestock farming principles and practices. Initiatives taken by organic farmers contribute a lot in regenerative food system. The world is benefited from this.

# **Organic Feed and Fodder Management for Livestock**

It has a crucial role in betterment of organic farming systems. It ensures environmental sustainability, animal welfare and organic certification standards also. Let's have a glance on a comprehensive overview of key aspects and practices included in organic feed and fodder management process as follows-

**1. Organic Feed Sourcing:** Feed sourcing for organic livestock production must be certified with organic standards. Besides, these should be free from synthetic pesticides, fertilizers, Genetically Modified Organisms (GMOs) along with other prohibited substances. Organic feed may contain forages, grains, protein supplements, vitamins fulfilling the nutritional requirements of multifarious livestock species.

2. Pasture and Forage-based Systems: Organic feed and fodder management involves the maximum utilization of pasture and forage-based systems specifically for ruminant animals (e.g. different cattle, sheep, goats). Organic



standards promote animal welfare through improving their natural behaviours by mandating access to pasture for grazing during the growing season of livestock.

**3. Rotational Grazing:** It involves planned movement of livestock across multiple paddocks or pastures. Being a key practice, rotational grazing system has a major impact on optimal forage utilization along with enhanced pasture health and productivity. The most beneficial fact is that rotational grazing reduces soil erosion and improves nutrient cycling too.

**4. Forage Diversity:** It is prioritized by most of the organic livestock producers. Because this practice can support overall animal health and productivity through providing them with a wide range of necessary nutrients. Application of forage diversity emphasizes plantation of diverse pasture species and incorporation of legumes for the very purpose of nitrogen fixation and protein supplementation. Besides it focuses on forage quality management through timely grazing and unique techniques of forage conservation.

**5. Silage and Hay Production:** Organic hay and silage production ensures high quality feedstuffs by avoiding synthetic or chemical additives. So it implies adherence to organic principles. Organic feed management includes such production and preservation of silage and hay as supplemental feed sources for crisis period i.e. particularly for non-grazing seasons. It is truly helpful during periods of limited forage availability too.

**6.** Crop rotation and diversification: These are considered as integral components of feed and fodder management. Farmers gain improved soil fertility, reduced pest and disease pressure by practicing extensive crop rotation. Such scientific techniques promote access to alternative feed sources i.e. cover crops and crop residues for livestock.

**7. On-farm Feed Production:** On-farm feed production is integrated to holistic farming systems. Many organic livestock producers initiate growing grains, legumes and forages on-site along with utilizing crop rotations. Besides intercropping and agroforestry techniques are also included for maximization of resource efficiency. It extremely supports livestock nutrition.

**8. Minimizing External Inputs:** Organic feed and fodder management prioritize the minimization of reliance on external inputs such as purchased feed and synthetic fertilizers, pesticides and herbicides. Instead, improvement of soil health, biological nitrogen fixation and natural pest and weed management strategies are applied by organic producers for enhancing feed production sustainability.

**9. Feed Processing and Storage:** Organic feed management aims at maintaining feed quality and preventing contamination. So feed processing and storage practices are carefully handled. The strategies involve drying, milling and mixing feed ingredients on-farm. Additionally proper storage facilities are executed for protecting feed from moisture, pests and mold.

**10. Record Keeping and Compliance:** Detailed records of feed and fodder management practices must be maintained by organic livestock producers. It is required to demonstrate compliance with organic certification standards. Such records include documentation of feed sourcing, pasture management, crop rotations and feed inventories for ensuring transparency in organic production systems.

In summary, a range of practices are involved in organic feed and fodder management for livestock. Those practices highly prioritize providing nutritionally balanced diets, fostering animal welfare along with enhancing environmental sustainability within organic farming systems. Pasture-based grazing, forage diversity, crop rotation and on-farm feed production etc. have multiple beneficial prospects for creating resilient and regenerative agricultural systems. The ultimate intention is supporting both livestock health and ecosystem health.

# **Organic Manure Production and Utilization:**

Some key aspects of organic manure production and utilization are discussed below:

# **1. Types of Organic Manure:**

**Compost:** It is produced through decomposition of organic substances (e.g. kitchen waste, crop residues, animal manure). So it is nutrient-rich organic fertilizer. It improves soil structure. Microbial activity and nutrient availability for plants are enhanced by utilization of compost.

**Farmyard Manure (FYM):** It is a mixture of some organic substances i.e. animal dung, urine, bedding materials and crop residues. It carries major essential nutrients (e.g. nitrogen, phosphorus, potassium) and helps in improving soil texture. Besides it enhances soil moisture retention.

**Green Manure:** We know that legumes, clover or vetch can add nitrogen into soil. These are called cover crops. Green manuring involves growth of such crops for improving soil fertility. These can suppress weeds and reduce soil erosion. **2. Production Methods:** 

**Composting:** Proper mixing of organic waste with carbon-rich materials i.e. straw or leaves, maintaining required moisture and aeration levels is necessary in composting. Compost piling should be regularly turned for accelerating decomposition. So this method involves aerobic decomposition of organic substances under controlled situations.



**Vermicomposting:** Earthworms are utilized here for decomposition of organic matter. Organic substances are converted to nutrient-rich vermicompost. Feeding on organic waste, earthworms excrete nutrient-rich castings. It improves soil fertility and microbial activity.

Anaerobic Digestion: It involves decomposition of organic matter in the absence of oxygen. It is used for production of biogas and digestate. This is an interesting process having some unique steps. Firstly organic waste is kept in sealed digesters. Anaerobic bacteria breakdown the organic waste there. Methane-rich biogas and nutrient-rich digestate are released as by-products.

**3. Nutrient Content and Benefits:** There is presence of essential nutrients such as NPK and organic substrates in organic manures. They help in promoting healthy growth, flowering and fruiting of plants through providing them a well balanced nutrient supply.

The specialty of organic manure is its excellent capacity in enhancing soil microbial activity, biodiversity and nutrient cycling. So it leads to enhanced soil health and fertility. Besides soil structure, porosity and water retention capacity enormously increase too. Organic manuring plays a great role in reducing soil erosion, runoff and nutrient leaching.

#### 4. Application Methods:

Various methods likewise broadcasting, banding, top dressing and incorporation into the soil during land preparation and planting are applied. The timing and application rate depend on multiple factors such as nutrient requirements by crops, soil fertility levels and variety of agronomic practices.

Uniform nutrient distribution requires proper application of organic manures. Minimization of nutrient losses along with maximization in crop uptake efficiency could be possible through appropriate organic manuring too. But one thing must be remembered that over-application of organic manures is so harmful that it may cause nutrient imbalance. It may lead to environmental pollution and crop damage. So it could harm the entire civilization.

# 5. Integration with crop rotation and agroecological practices:

We can't deny that production and utilization of organic manure are truly integral components of sustainable agricultural practices including crop rotation, agroforestry and integrated crop-livestock systems. Integration of organic manures with crop rotation has multiple beneficial effects. It enhances soil fertility and suppresses pests and diseases. Ultimately crop resilience could be improved to environmental stresses.

#### 6. Quality Assurance and Standards:

Adherence to organic farming principles and certification standards is strictly mandatory for organic manure production and utilization. Organic farmers must be careful to organic production standards, maintenance of detailed records and regular inspections for ensuring the compliance with organic farming practices along with quality assurance requirements.

So, overall it is to be said that enhancement of soil fertility and minimization of environmental impacts could be easier through integration of organic manures in agricultural systems.

#### **Importance of Organic Breeding and Genetics**

Organic breeding and genetics have a significant role in promotion of environmental friendly sustainable agricultural practices. Following key points focus on the importance of organic breeding and genetics –

**1. Biodiversity Conservation:** Preservation and promotion of biodiversity are well emphasized through organic breeding. Immense efforts are given on cultivation of a wide range of crop varieties and livestock breeds adapted to varied environmental conditions. This fosters resilient ecosystems.

**2.** Adaptation to Local Conditions: Developing livestock varieties and breeds those are well-adapted to local climatic situations is highly prioritized in organic breeding. This contributes a lot in prolonged sustainability. Because ability enhancement of crops and animals are practiced for enabling them thriving without maximum dependence on external inputs.

**3. Reduced Dependency on Chemical Inputs:** Naturally disease and pest resistant plants and animals are emphasized to be developed through organic breeding practice. Reliance on chemical pesticides and antibiotics could be reduced. It implies the adherence to principles of organic farming.

**4. Enhanced Nutrient Efficiency:** Organic breeding ensures optimal growth with minimal input through improving the nutrient-use efficiency of crops and livestock. It minimizes environmental pollution along with important nutrient runoff.

**5. Resilience to Climate Change:** Organic breeding aims at focusing on development of resilient varieties having withstanding capacity in extreme adverse weather situations including changes in temperature and variations in precipitation. So increasing challenges posed by climate change could be diminished with appropriate organic breeding practices.



**6. Promotion of Non-GMO Varieties:** Use of Genetically Modified Organisms (GMOs) is not aligned with organic principles. Application of GMOs is restricted in organic breeding. So this helps a lot in promoting consumer confidence in the organic label along with resolving the issues related to the environmental and health impacts of GMOs.

**7. Improved Soil Health:** Soil health is improved by organic breeding as it focuses on developing crops those are wellsuited to organic farming practices. Particularly crops with deep root systems are developed. It enhances soil structure along with nutrient cycling.

**8.** Support for Sustainable Livestock Production: Specific traits are given emphasis in organic livestock breeding system. Disease resistance, foraging ability, adaptability to organic management systems etc. are mainly prioritized. So sustainable livestock production could be possible through this.

**9.** Consumer Health and Safety: Organic plant breeding prioritizes enhancing nutritional content and flavour in crops. So it has an important contribution to the overall quality and taste of organic produce. Consumers get multiple health benefits.

**10. Market Demand and Economic Opportunities:** Growing demand for organic products bring economic opportunities for organic farm practitioners engaged in organic breeding practices. Lead in market competitiveness and farmers' increased income is achievable through developing varieties and breeds those meet the organic standards.

In summary, it is to be mentioned that organic breeding and genetics are essential components of sustainable agriculture. It has a crucial contribution in promotion of biodiversity, reduction in environmental impacts and mitigation of several critical challenges faced by farmers in organic systems.

# 3. SELECTION CRITERIA FOR BREEDING ORGANIC LIVESTOCK :

Considering specific traits aligned with the principles of organic farming is truly important for selection of breeding stocks for the purpose of organic livestock production. Multiple traits are considered such as sustainability, natural adaptation and minimal reliance on external inputs etc. Some key selection criteria for breeding organic livestock are discussed as follows:

**1. Adaptability to Organic Systems:** Animals having the ability to adapt to pasture-based feeding, rotational grazing and other organic practices are mainly chosen for breeding. It is considered if the animals can thrive in organic management systems or not.

**2. Health and Disease Resistance:** Animals with strong immune systems and resistance to common diseases are highly prioritized. Such traits automatically minimize the requisite for antibiotics and other medical interventions.

**3. Natural Foraging Ability:** Breeding with strong grazing instincts and nutrient obtaining ability from pasture and forage are often selected. This has vital contributions to a more eco-friendly and natural feeding system.

**4. Reproductive Performance:** Reproductive traits are seriously considered in organic breeding. Such traits include fertility, ease of calving or lambing and mothering ability etc. Efficient reproduction is truly vital for maintaining a sustainable herd or flock.

**5. Pasture Efficiency:** Livestock having some specific traits such as feed efficiency and effective grazing ability are highly prioritized. So animals with extreme efficiency of conversion of pasture and forage into meat, milk or wool are often chosen for super quality breeding.

**6. Resilience to Environmental Stress:** Environmentally resilient breeds or individuals are sincerely emphasized. Their capacity of resilience to environmental stressors is considered. Their robustness in extreme temperatures, variable weather conditions and changes in pasture quality are also included among those factors.

7. Genetic Diversity: Organic breeding focuses on overall resilience. So serious effort is given in maintaining genetic diversity within the herd or flock. It aims at reducing the vulnerability to specific diseases or environmental challenges.
8. Temperament and Behaviour: There is another interesting strategy that temperament and behaviour of the animals are also considered. The livestock those are docile and easily malleable in stressful environments are normally selected.

**9. Conformation and Structure:** Physical conformation and structure of animals are well assessed for ensuring their soundness and longevity. Traits such as locomotion, udder health and overall body condition are considered.

**10. Chemical Input-free Production:** Breeds or lines those are raised without dependence on synthetic growth promoters, hormones or other chemical inputs are highly prioritized. Because their production process aligns with organic farming standards.

**11. Certification and Traceability:** Breeding stocks are often selected from certified organic sources for ensuring the traceability and conformity of the genetic material with organic standards.

**12. Performance Records:** Evaluation of the genetic potential for organic production traits is truly essential. Performance records and data are considered from previous generations for such evaluation.

**13. Local Adaptation:** Normally the particular breeds or lines those are well adapted to local climate, terrain and grazing conditions are preferred for promotion of sustainability and efficiency.



**14. Community and Market Considerations:** Preferences of the local community and market are considered at the time of selection of specific breeds. It ensures that the chosen genetics aligns with consumer expectations for organic products.

Organic livestock producers become confirmed through careful consideration of these selection criteria that if they can build and maintain a breeding program aligned with the principles of organic farming. It accelerates the promotion of sustainable and environmental friendly practices.



# 4. CONCLUSION:

Organic livestock management practices should be adapted by livestock farm practitioners to serve the community with nutritious and healthy products. Environmental sustainability must be kept in mind too. So thorough guideline should be there to guide researchers in right track. This paper is such an effort to encourage more research in this particular sector. Rural business management in agriculture and allied sector could be flourished in such way that would make miraculous positive change in country's economy.

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