SUSTAvianFEED

Guidelines for smallholders



























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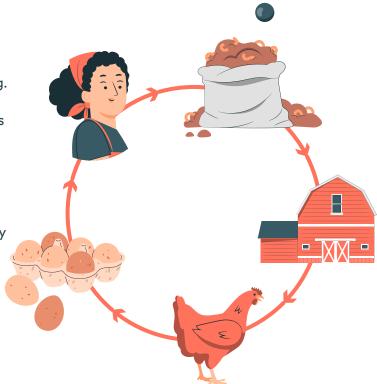
THE NEED FOR SUSTAINABLE LIVESTOCK AND FEED SOLUTIONS



SUSTAvianFEED addresses urgent needs in sustainable livestock farming by developing alternative feed solutions and empowering rural communities.

With the dual goals of reducing reliance on imported feed and promoting sustainable practices, SUSTAvianFEED seeks to create a **circular, resilient model** for poultry farming. This model strengthens local economies, reduces environmental impact, and empowers rural farmers—especially women— to lead in **sustainable agriculture.**

The project focuses on insect-based and byproduct feeds as viable alternatives to conventional, often imported, feed options. By supporting sustainable feed production, promoting native poultry breeds, and implementing extensive livestock farming practices.





DEVELOPING ALTERNATIVE DIETS AND REDUCING DEPENDENCY ON IMPORTED FEED

In many rural areas, livestock farmers rely heavily on imported feed, which makes them vulnerable to market fluctuations and supply issues.

The SUSTAvianFEED project has developed a series of alternative diets, utilizing local agricultural byproducts and insect-based protein sources to reduce dependency on external inputs.

Methodology

The process starts with a thorough analysis of available byproducts and materials, determining their nutritional suitability as feed. Using Life Cycle Assessment (LCA) tools, the project evaluates the **environmental impact** of each potential feed ingredient. This evidence-based approach ensures that all feed options contribute to a **more** sustainable and efficient production system.

Results

Through these alternative diets, local farmers can access affordable, high-quality feed options that not only reduce costs but also enhance ecological sustainability. SUSTAvianFEED has proven that by integrating locally sourced byproducts and insect-based feeds, farmers can significantly reduce their carbon footprint and enhance their economic independence.





INSECT-BASED FEED: PRODUCTION, BENEFITS, AND ANIMAL WELFARE

Insect farming represents a promising solution in the search for sustainable, high-protein poultry feed. Insects require minimal resources to grow, making them an eco-friendly option for rural farmers.



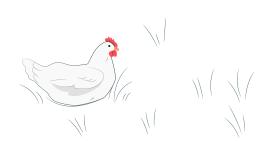
Additionally, insect-based feeds align closely with the natural diet of poultry, which has positive effects on animal welfare.

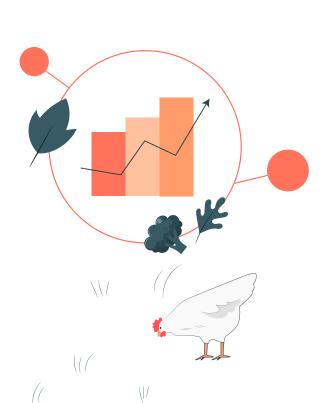


The project partners developed low- and medium-tech insect production schemes tailored to smallholders. By utilizing low-cost containers and locally sourced organic waste, farmers can raise insects sustainably with **minimal infrastructure**. These production models have been piloted with partner farms and proved effective in rural settings.

Advantages of Insect-Based Feed

Insect feed offers an ethical and sustainable protein source that is affordable and efficient. Compared to traditional feeds, insects provide a higher protein-to-resource ratio and lower environmental impact. In addition, insect-based feeds support the natural dietary needs of poultry, contributing to **better health and welfare** outcomes.





BENEFITS OF USING NATIVE POULTRY BREEDS AND EXTENSIVE LIVESTOCK FARMING

Native Breeds

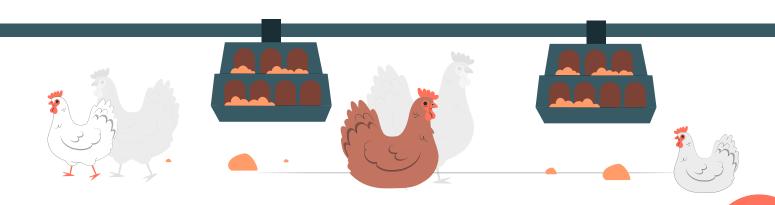
Native poultry breeds are particularly **well-suited** to local climates and environmental conditions, offering natural resilience against diseases and environmental stressors. The SUSTAvianFEED project focuses on these breeds because they represent a sustainable option that does not require intensive management.

Extensive Farming

Extensive, or free-range, poultry farming enhances biodiversity, promotes healthy ecosystems, and regenerates soil. By allowing native breeds to graze freely, farmers contribute to natural nutrient cycling, which is essential for long-term soil health. This approach also benefits rural communities by reducing costs associated with intensive farming and fostering a close connection between farmers and their environment.

Climate Resilience

Native breeds **are better adapted** to withstand local climatic changes, making them an asset in regions vulnerable to climate variability. By focusing on resilient breeds, SUSTAvianFEED strengthens rural communities' ability to adapt to environmental challenges.



ECONOMIC AND SOCIAL IMPACT ON RURAL COMMUNITIES

The **SUSTAvianFEED** project recognizes that economic resilience in rural areas depends on more than just sustainable practices; it requires a community-oriented approach that supports livelihoods and social well-being.



Economies of Scale in Livestock Farming

By creating scalable, sustainable poultry models, the project provides rural farmers with a viable pathway to grow their operations without compromising ecological balance. Economies of scale enable smallholders to **increase production** efficiently, which in turn boosts local food supplies and enhances food security.

Symbiosis in Rural

Communities

The project fosters strong symbiotic relationships within rural communities, as each participant benefits from shared resources and knowledge. By collaborating through farmer associations, local producers can share resources, exchange insights, and collectively market their products, reinforcing community bonds and building social capital.



CERTIFICATION AND MARKET DIFFERENTIATION FOR LOCAL, SUSTAINABLE PRODUCTS



Certification

SUSTAvianFEED aims to certify native-breed poultry products to highlight their ecological and ethical value. This certification enhances market differentiation, creating a niche for **high-quality**, sustainable poultry products that **consumers can trust.**

Label developed by SustavianFeed for sustainable poultry farming.



One welfare Eco-label

The thermometer shows the sustainability of this product's production chain.





Scan the QR code and discover how our products proudly support sustainability



ANIMAL WELFARE



NATURAL FEED



BIODIVERSITY SAFEGUARDING



LANDSCAPE SAFEGUARDING



WATER CONSUMPTION



CLIMATE EMISSIONS CONTROL



RECYCLING WASTE



> Z

LOCAL PRODUCTION



SOCIAL WELFARE AND EQUITY

Market Differentiation

With certified, native-breed products, rural farmers gain access to new markets, allowing them to sell at **higher prices** and expand their reach. Local markets are a priority, and these products are positioned as premium options for conscious consumers seeking ethical and sustainable choices.

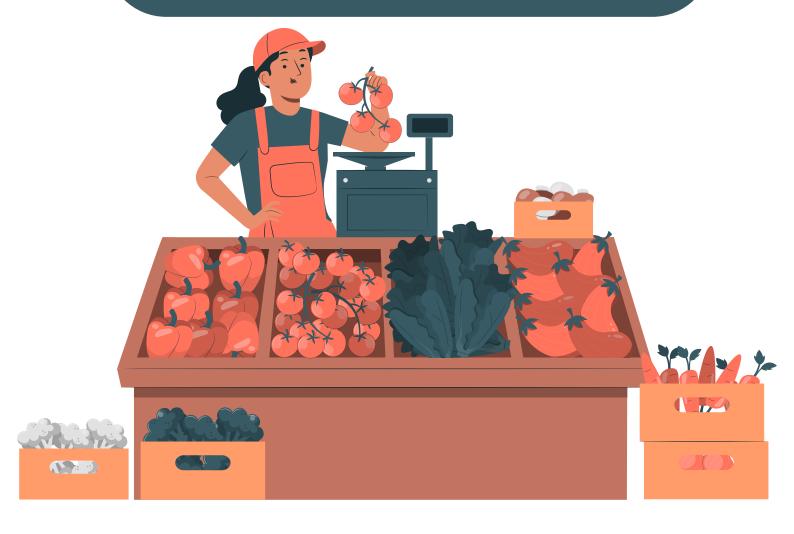


This differentiation not only brings higher income for farmers but also raises awareness about the value of sustainable agriculture.

SCALABILITY OF ALTERNATIVE FEED SOLUTIONS FOR INDUSTRIAL APPLICATIONS

While SUSTAvianFEED primarily supports smallholders, the project's findings have potential for larger-scale applications. The alternative feed models—particularly insect-based protein and byproduct utilization—can be adapted to industrial poultry production, offering the sector a sustainable, high-efficiency option that aligns with circular economy principles.

This scalability provides a pathway for intensive production systems to reduce their environmental impact and dependence on imported feed, contributing to a more resilient global food system.



CONCLUSION SUSTAINABLE PURAL LIVESTO

SUSTAINABLE RURAL LIVESTOCK FARMING AS A PATH TO CLIMATE RESILIENCE



The **SUSTAvianFEED** project demonstrates that sustainable livestock practices – centered on alternative feeds, native breeds, extensive farming, and social collaboration – can create lasting resilience in rural communities.

By promoting association among farmers and, the project enhances community ties and economic sustainability, positioning livestock farming as a regenerative force in rural ecosystems.

Through a focus on climate adaptation and symbiosis with the environment, **SUSTAvianFEED** lays the groundwork for rural communities to thrive amidst climate challenges, making sustainable agriculture a reality.



Thank you for reading our guide!
For more resources and sustainable poultry
farming insights, visit
sustavianfeed.eu

