

The Perceived Benefits of Farmers and Pet Owners on The Effect of Using Madre De Cacao and Aloe Vera Soap-Based Formulae for Animal Care

Sitti Kauzar S. Ayub, Arsima M. Yusop , Nurhan J. Mohammad. Abnir-Khan K. Sisam, Jasrina J. Nuhil and Fatima Nhelsa H. Udi

School of Agriculture, Sulu State College, Philippines

DOI: <https://doi.org/10.51584/IJRIAS.2025.100900016>

Received: 07 September 2025; Accepted: 13 September 2025; Published: 11 October 2025

ABSTRACT

This study focused on the “**The Perceived Benefits Of Farmers And Pet Owners On The Effect Of Using Madre De Cacao And Aloe Vera Soap-Based Formulae For Animal Care**”. This research was conducted at the experimental area of SSC School of Agriculture, Gandasuli, Patikul, Sulu, from February 03, 2024, to April 08, 2024. It especially sought to answer the following queries:

1. What are the perceived benefits of JAANNS soap to the farmers and pet owners?
2. What are the effects of JAANNS soap on the animal's skin as observed by farmers and pet owners?
3. Is there a significant difference on the perceived benefits of JAANNS soap according to the pet owners and farmers?

This study explores the preferences of farmers and pet owners regarding the use of Madre de Cacao (*Gliricidia sepium*) and Aloe vera soap-based formulas for animal care, with a focus on their perceived effectiveness, benefits, and overall satisfaction. Madre de Cacao is traditionally known for its antifungal, antibacterial, and antiparasitic properties, making it a common choice for animal care, particularly in addressing skin diseases, wounds, and parasites. Meanwhile, Aloe vera is recognized for its soothing, moisturizing, and healing effects, offering potential benefits in improving skin conditions and overall hygiene in animals.

This study aimed to determine the preference of farmers and pet owners regarding the effects of using Madre de Cacao and Aloe Vera soap-based formulae (JAANNS soap) for animal care. The research employed a quantitative method through the use of a survey questionnaire to gather data from both farmers and pet owners.

The study employed a survey-based approach to gather data from farmers and pet owners regarding their experiences, preferences, and observations when using soap-based formulas containing these natural ingredients. Key variables included effectiveness in addressing animal skin issues (e.g., mange, itching, wounds), ease of use, safety for animals, cost efficiency, and environmental impact. Statistical analysis was applied to determine trends and significant preferences between the two groups.

The findings revealed that there Is no significant difference in the effects of the soap between animals owned by farmers and those owned by pet owners. This indicates that both groups' animals can benefit equally from the use of JAANNS soap.

Keywords: Soap-Based, Aloe Vera, Madre De Cacao

INTRODUCTION

Background of the Study

In recent years, there has been a growing interest in utilizing natural and herbal remedies for animal care, as farmers and pet owners increasingly seek sustainable and eco-friendly alternatives to chemical-based products.

Among these natural remedies, Madre de cacao (*Gliricidia sepium*) and Aloe Vera stand out for their potential benefits in treating skin conditions and promoting overall health in animals.

Madre de cacao, a tropical leguminous tree, has long been recognized for its medicinal properties, particularly in pest control, wound healing, and skin treatment. It contains tannins and other compounds that have insecticidal and antiparasitic effects, making it popular among farmers in rural areas for treating mange, ticks, and other parasitic infestations in livestock and pets. Similarly, Aloe Vera, a succulent plant widely known for its soothing and healing properties, has been used to treat burns, skin irritations, and wounds in both humans and animals. Its antimicrobial, anti-inflammatory, and moisturizing effects make it a promising ingredient in animal care products.

The use of Madre de cacao and Aloe vera in soap-based formulae offers a natural approach to managing skin conditions and protecting the health of animals. This is particularly significant in farming communities, where the health and productivity of livestock are essential for livelihood, and among pet owners who prioritize the well-being of their companion animals. However, while these natural ingredients are traditionally known for their benefits, there is a need to assess their efficacy and acceptability when formulated into soap for regular animal care.

This study aims to evaluate the preferences of farmers and pet owners regarding the use of soap-based formulae containing Madre de cacao and Aloe vera. By understanding their preferences, the study seeks to explore the perceived effectiveness, ease of use, and overall satisfaction with these natural soap products compared to conventional alternatives. The insights gained from this research may contribute to the promotion of more sustainable and health-conscious animal care practices.

Ingredients Benefits

Aloe contains enzymes that help heal itchy skin and reduce inflammation. Aloe vera also contains around 75 other components that give it healing properties. These include: Vitamins A, C, and E (antioxidants that neutralize free radicals) Vitamin B12, folic acid, and choline Minerals like calcium, copper, magnesium, potassium, and zinc

Anthraquinones (often used to relieve constipation) Lignin (stimulates digestion)

Saponins (cleansing and antiseptic effect) Salicylic acids (an exfoliant) 20 Amino acids (including 8 of the 10 essential amino acids for dogs) Hormones Fatty acids and sugars

These components lend anti-inflammatory, analgesic, and antiseptic properties. Cats often suffer from various skin issues, such as allergies, infections, and dryness. Aloe vera is known for its natural anti-inflammatory and antibacterial properties, which can benefit your cat's skin. The mucopolysaccharides present in aloe vera help bind moisture into the skin, which is great for cats with dry or irritated skin. The natural salicylic acid in aloe vera can also act as a pain reliever, helping to ease discomfort from scratches or bites.

According to Kapuluan (2024) Coconut Oil is over 40% lauric acid, the richest source naturally available.

Healthy Skin And Coat

Clears up eczema, Aids flea allergies, contact dermatitis, and itchy skin

Minimizes odor, Reduces allergic reactions, Creates sleek and glossy coats

Prevents and treats yeast and fungal infections, When applied topically, coconut oil promotes wound healing. It also can help with hot spots, dry skin, and hair, bites, and stings

Madre de Cacao (*Gliricidia sepium*) is a leguminous tree, 3 to 20 meters high. Leaves are 15 to 25 centimeters with 13 leaflets which are opposite, oblong-ovate 4 to 6 centimeters long, with a pointed tip and rounded base. It belongs to the family Fabaceae and originated in Central America.

Its parts like leaves, root, and bark are used in several tropical countries for different purposes (Delos Santos, 2019). He also added that Madre de Cacao has been used in the treatment of patients with pathogenic bacterial infections, skin diseases, nematodes, and is reported to possess antioxidants and insecticidal properties. Madre de cacao, a plant native to Southeast Asia, has been traditionally used for its insecticidal properties. It contains active compounds that are known to repel and

eliminate various pests, including ticks and lice. Therefore the Aloe Vera, coconut oil and Madre cacao is the key ingredients to solve the farmers problem.

This product name JAANNS Soap comes from the name of the researchers and Adviser, namely: J- Jsrina, A- Abnir-khan, A- Arsima, N- Nurhan, N- Nhelsa and S- Sitti Kauzar.

Statement of the Problem

This study aimed to determine the perceived benefits of farmers and pet owners on the effect of using Madre De Cacao and Aloe Vera soap-based formulae for animal care. Therefore, it seeks to answer the following questions:

1. What are the perceived benefits of JAANNS soap to the farmers and pet owners?
2. What are the effects of JAANNS soap on the animal's skin as observed by farmers and pet owners?
3. Is there a significant difference on the perceived benefits of JAANNS soap according to the pet owners and farmers?

Objectives of The Study

The purpose of this study is to determine the perceived benefits of farmers and pet owners on the effect of using Madre De Cacao and Aloe Vera soap-based formulae for animal care and raise the following objectives.

1. To determine the perceived benefits of JAANNS soap to the farmers and pet owners.
2. To investigate the effects of JAANNS soap on the animal skin as observed by farmers and pet owners.
3. To find out if there is a significant difference on the perceived benefits of JAANNS soap according to the pet owners and farmers.

Hypothesis of the study

The hypotheses of this study are raised as null (H_0) and alternate (H_a).

H_0 : There is no significant difference on the perceived benefits of JAANNS soap according to the pet owners and farmers.

H_a : There is a significant difference on the perceived benefits of JAANNS soap according to the pet owners and farmers.

THEORETICAL FRAMEWORK

The following framework combines theoretical and practical considerations to understand preferences and effectiveness in adopting the soap-based formula.

Adoption of Natural Alternatives Theory

The decision-making process of farmers and pet owners to adopt natural alternatives aligns with the Diffusion of Innovations Theory (Rogers, 2019). This theory suggests that the adoption of new practices or products is influenced by factors such as: Relative advantage: The perceived benefits of using Madre de cacao and Aloe

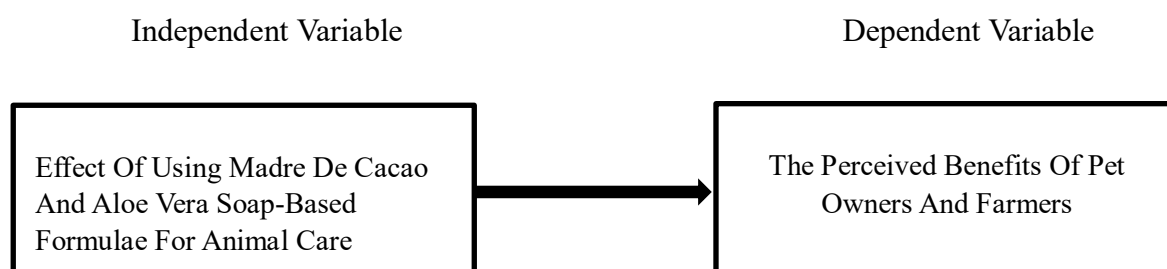
vera soap compared to synthetic products, including improved animal health and reduced environmental harm. Compatibility: Alignment with the users' values.

Theory of Planned Behavior (Ajzen, 2019)

The Theory of Planned Behavior explains how attitudes, subjective norms, and perceived behavioral control influence farmers and pet owners' preferences: Attitudes: Positive experiences with plant-based formulations enhance confidence in the efficacy of Madre de cacao and Aloe vera soap. Subjective norms: Recommendations from veterinarians or fellow pet owners can drive adoption. Perceived behavioral control: Accessibility and affordability of the soap increase the likelihood of its usage.

CONCEPTUAL FRAMEWORK

Figure 1.1 The Conceptual Framework of the Study



The conceptual framework of the study conceptualized the relationship between the independent variable and dependent variable; the effect of using Madre De Cacao and Aloe Vera soap-based formulae for animal care served as the independent variable, and the perceived benefits of pet owners and farmers served as the dependent variable. It is believed that the effect of using Madre De Cacao and Aloe Vera soap-based formulas for animal care can directly affect the preferences of the pet owners and farmers. Furthermore, the independent variable box has the power to control the dependent variable box and make changes to it.

Significance of the study

The researchers study aimed to come up with a solution for the animals skin problems with the help of three ingredients, which are aloe vera, coconut oil, and madre de cacao, to treat common diseases or skin problems of animals like skin rashes, unhealthy coats, loss of hair, insect bites, and removing parasites like ticks, lice, and mites. Thus, this study will be beneficial to the following:

Farmers

This study helped farmers because they may use locally available materials to encourage sustainable farming methods and lessen their need for industrial products, and homemade soap, such as JAANNS soap, can be less expensive than commercial veterinary products.

Pet Owners

The research study benefited those who own cats, goats, and cattle that are affected by common skin problems or diseases. The owner will know what the components of our JAANNS soap are that help to cure the animals skin problems or diseases.

Future Researchers

The researcher benefited from the study by gaining a better understanding of the steps involved in creating animal soap using aloe vera, coconut oil, and Madre de cacao. The researcher's study may serve as an extra source of information for future research.

Scope and limitations of the study

This study is focused on the perceived benefits of farmers and pet owners on the effect of using Madre De Cacao and Aloe Vera soap-based formulas for animal care; likewise, it is delimited to thirty (30) individuals, who are the respondents of this study. These individuals are twenty (20) farmers and ten (10) pet owners, both of whom consist of male and female.

This research study also delimited knowing the efficacy of the formula of JAANNS soap; in addition, JAANNS soap ingredients such as Madre de cacao, coconut oil, and aloe vera can compare the efficacy of these methods in treating common skin problems in animals. The study used descriptive analysis as a method to address the research questions and to ensure the accuracy and effectiveness of JAANNS soap in treating common skin problems in animals.

Moreover, this research study is conducted by Bachelor of Science in Agriculture students majoring in Animal Science in the academic year of 2024-2025.

Operational Definition of Terms

The following key terms are hereby defined in this study:

1. **Aloe Vera** – In this study Aloe Vera is defined as one of the ingredients of JAANNS soap, Aloe Vera is a type of plant with thick pointed leaves, or the thick liquid found in the leaves that is used to treat damaged skin.
2. **Animal** – An animal is a living thing that can move and eat and react to the world through its senses, esp. of sight and hearing: Mammals, insects, reptiles, and birds are all animals. In ordinary use, animal means all living beings
3. **Animal Care** – In this study animal care is defined as the means of facility where animals or household pets are groomed, clipped, bathed, boarded, or similar non-medical care is provided.
4. **Effect of Using JAANS Soap** – These terms are defined in this study as the effects of using JAANNS Soap to the farmers and pet owners animal.
5. **Farmers** - In this study farmers are the workers of some aspect of agriculture, growing vegetables, grains, or fruit; or raising animals for milk, eggs, or meat.
6. **JAANNS Soap** – In this study JAANNS Soap is the Madre De Cacao and Aloe Vera Soap-Based formulae for animal care, as well as the product of the researchers. This product name JAANNS Soap comes from the name of the researchers and Adviser, namely: J- Jasrina, A- Abnir-khan, A- Arsima , N- Nurhan , N- Nhelsa and S- Sitti Kauzar.
7. **Madre De Cacao** – In this study these terms are defined as the common name madre de cacao (literally “mother of cacao” in Spanish) used in Central America and the Philippines is in reference to its traditional use as shade trees for cocoa tree plantations.
8. **Pet Owners** – These terms are defined as a person who owns a pet. Pet owners are responsible for providing the care and support their pets need to live happy and healthy lives.
9. **Preference of the Farmers and Pet Owners** – These terms are defined as the desires of the farmers and pet owners for their animals, preferences of choosing JAANNS Soap for animal care.
10. **Virgin Coconut Oil** – Virgin coconut oil usually has not been bleached, deodorized, or refined. Virgin oil is typically made from fresh coconuts, but processing techniques will still vary in determining the product’s quality
11. **Soap-based Formulae** – In this study a soap-based formulae are the exact chemical formula is $C_{17}H_{35}COO^-$ plus a metal cation, either Na^+ or K^+ . and also the basis of JAANS soap

CHAPTER III

METHODOLOGY

This chapter presents the methodology that was used in collecting the data necessary for the study on the Farmers and Pet Owners Preference on the Effect of Using Madre de cacao and Aloe Vera Soap-based Formulae for Animal Care.

Research Design

This study used a descriptive quantitative method, as the research design, Descriptive quantitative method was used in gathering the perception of the respondents on the Farmers and Pet Owners Perceived Benefits on the Effect of Using Madre de cacao and Aloe Vera Soap-based Formulae for Animal Care. The quantitative method approach in research study is a systematic and structured approach that involves the collection and analysis of numerical data to answer research questions and test hypotheses. It focuses on gathering data that can be measured and analyzed statistically. This approach typically involves the use of surveys, experiments, and statistical analysis to draw conclusions and make generalizations about a population.

Research Locale

This research was conducted at Sulu State College, School of Agriculture Gandasuli, Patikul, Sulu, of Agriculture student major in Animal Science together with their adviser from January to May academic year 2023-2024.

Respondents of the Study

The researcher was conducted a survey to the respondents and administered the survey questionnaire for them. The target respondents of this study was 30 individuals; 20 farmers and 10 pet owners of Barangay Gandasuli, who owns several numbers of pets and animals, they are both consist of male and female. The feedback and opinions of the respondents to the survey questionnaire checklist that will be administered by the researchers during the data collection.

Table 3.1 Target Respondents

Gender	Age	Educational Attainment	Classification	Numbers of pet/animals
Male	20-25	Undergraduate	Farmer	10 cats
Female	26-31	Diploma	Pet Owner	10 cattle/cow
	32-40	Degree		10 goats
	41-50			
	51 – Above			
Total Respondents – 30 individuals (20 farmers and 10 pet owners)				

Sampling Design

In this study, the researchers utilized purposive sampling that was used to select the respondents necessary in this study. Purposive sampling is a type of probability sampling, wherein the researchers select the respondents who are only farmers and pet owners.

Research Instrument

The instrument utilized in this study was a survey questionnaire checklist to gather the perception from feedback of the respondents. The questionnaire is comprised of two (2) parts, which are Part I for the demographic profile of the respondents and Part II, which has fifteen (15) statements that focus on the effects of using madre de cacao and aloe vera soap-based formulas for animal care. The data collection tools (research instruments) should be designed in such a way that they would be able to accurately measure the intended construct under investigation and ensure the meaningfulness of the study findings. This would greatly enhance the believably and trustworthiness of the research findings, especially if the study is repeated by different investigators under the same conditions or with different research instruments measuring the same construct. The questionnaire is a set of printed or written questions with a choice of answers, devised for the purposes of a survey or statistical study.

Data Gathering Procedure

The procedure of gathering the data was the following: first, the researchers secured permission from the adviser and college dean of the School of Agriculture as well as a letter of permission for the respondents for their consideration and cooperation. Upon approval, the researcher will meet the respondents and distribute the assent and consent form and orient the respondents on the purpose of the study. The respondents will be given at least 15 minutes to answer the survey questionnaire.

Afterwards, their responses or feedback on the questionnaire will be treated with utmost confidentiality and will solely be used for the purpose of the study.

Ethical Considerations

The study adhered to ethical guidelines for the farmers and pet owners involved in the study, who were informed about the purpose, methods, and potential benefits of the study. The animals involved in this have the consent of their owners and understand the implications of using the formula on their animals. Addressing these ethical considerations, the study can ensure the well-being of participants (both human and animal), maintain scientific integrity, and contribute positively to the community. Moreover, this study adhered to ethical guidelines regarding research on animals, herbal products, and human participants.

Statistical Treatment of Data

The statistical treatment to be used in analyzing the research questions was the following: Statistical Package for Social Science (SPSS), including frequency and percentage distribution to identify the percentage of the demographic profile of the respondents in terms of age, gender, and educational attainment. For research question number 1 and 2, the weighted arithmetic mean will be used to determine the mean of each statement along the survey questionnaire, the t-test for independent samples, to find out if there is/is there a significant difference in the perceived benefits of JAANNS soap according to the farmers and pet owners.

Procedure of Making JAANNS Soap

In this chapter, the researcher discussed how to properly formulate the JAANNS soap by enumerating and discussing the physical properties of each ingredient and discussing how those ingredients help the different kinds of skin problems of animals.

Material/Component Gathering

Madre de cacao and aloe vera were collected; it's free and can be found in one of the research gardens, and the distilled water can be bought from any water refilling station within Jolo Sulu. soap-based, soap molder, pillow pack packaging 70g, and mini vacuum sealer that can be found on Shopee, while the sticker can be printed in any computer shop.

Formulation procedure

The researcher's ingredients in making JAANNS soap are the extract of the Madre de cacao leaves, aloe vera, coconut oil and soap based. To get the extract of Madre de cacao leaves, the researcher first washed the 630 Madre de cacao leaves with clean water to remove any dirty particles and smashed the leaves with 150 ml of distilled water. After that, the leaves will be separated, but some stay. The aloe vera is composed of 3 stems. The coconut oil is 5 ml, while the soap base is one kilo. The process of making JAANNS soap is first melting the soap base, then adding the ingredients and mixing it till it's ready, cooling it down, then putting it in the molder, and after that JAANNS soap is ready.

Soap Components

Madre de cacao leaves

Madre de cacao is a smooth, deciduous tree, 3 to 10 meters high. Leaves are 15 to 25 centimeters long with 13 leaflets which are opposite, oblong-ovate, 4 to 6 centimeters long, with a pointed tip and rounded base. Racemes are numerous on leafless branches, containing many flowers. Flowers are pink, 2 centimeters long, with a truncate calyx. The standard is reflexes and pale-yellow in the median part. The pods are narrowly oblong to oblanceolate, 10 to 14 centimeters long, about 2 centimeters wide, containing 6 to 8 seeds.

distilled water

Distilled water is water purified by boiling it into steam such that contaminants and minerals are left behind and then cooling and condensing it back into a liquid. It is suitable for drinking, medical sterilization, and manufacturing processes.

Aloe vera

Aloe Vera is the ideal care product for the coat and skin of goat, cats, and Cattle. The skin is challenged in many ways, as it has to withstand environmental influences such as heat, cold and moisture, dirt, toxins as well as bacteria and parasites and protect the body from harmful UV radiation. Disturbances in the skin, which consists of several layers and cell types, can lead to serious illnesses in the form of infections and allergies. Aloe Vera can be used as a supportive treatment for almost all types of skin irritations. The excellent interaction of its various ingredients promotes the healing process such as:

1. wound-healing
2. anti-inflammatory
3. stimulates blood circulation
4. moisturizing
5. decongestant and cooling
6. fast analgesic
7. anti-bleeding and anti-pruritus
8. antibacterial (against bacteria)
9. anti-fungal (against fungi)
10. antiviral (against viruses)
11. partly slightly parasite repellent (mosquitoes, fleas, ticks)
12. mildly caring for a shiny coat and relaxed skin

Virgin coconut oil

Virgin coconut oil is the naturally processed, chemically free and additive free product from fresh coconut meat or its derivatives (coconut milk and coconut milk residue), which has not undergone any chemical processing after extraction. It is the purest form of coconut oil, water white in color, contains natural vitamin E and has not undergone hydrolytic or atmospheric oxidation as attested by its very low free fatty acid content and peroxide value. It has a mild to intense fresh coconut scent depending on the type of process used for production.

Soap- based

Glycerin soap base is made with natural vegetable skincare oils, oat protein and 20% Vegetable Glycerin, making this soap both soothing and cleansing and gives a creamy lather for the skin. This soap base is gentler on the skin than most soaps, making it a good choice for people who have particularly dry or sensitive skin. It also has a lower pH than other soaps, which helps the skin retain its natural moisture. We use two types of soap bases which are Clear and White.

Testing procedure

For the testing of products, the researcher was giving each soap to the farmers and pet owners to test the soap to their pets/ farm animals that suffer from skin disease. The Researchers first advise the pet owners and farmers to patch test first before applying to their animals and pet. The respondent will apply the soap to their pets/ farm animals every bathing after the application of the product ,the remaining residue will be rinsed off then the

observation will start to see if the product is effective against common skin problems or disease present in the test subject the observation process will last for one week and the application of the product will be 3 times a week, every other day.

RESULTS AND DISCUSSIONS

This chapter presents the results and discussions for this study “The Perceived benefits of Farmers and Pet Owners on the Effect of Using Madre De Cacao and Aloe Vera Soap-based Formulae for Animal Care”

To gather the data needed for the results and findings, the researchers employed Statistical Package for Social Science (SPSS) including;

1. **Frequency and Percentage Distribution.** to identify the percentage of the demographic profile of the respondents in terms of age, gender, and educational attainment.
2. **Weighted Arithmetic Mean.** will be used to determine the mean of each statement along the survey questionnaire.
3. **t-test for independent samples.** to find out if there is/there is no significant difference on the perceived benefits of JAANNS soap according to the pet owners and farmers.

Table 4.1 The Demographic Profile of the respondents in terms of Age

Age	Frequency	Percentage
20-25	19	66.33%
26-31	6	20.0%
32-40	3	10.0%
41-50	0	0
51 – Above	2	6.67%
Total	30	100.0%

Interpretation

Table 4.1 presents the frequency and percentage of demographic profile of the respondents in terms of age. The table illustrates that the majority of the respondents have age 20-25, and equivalent to 66.33%, followed by 26-31 with a frequency of 6, 20%, then age 32-40 have obtained 3(10%) respondents, and lastly 51 and above have only 2 frequency (6.67%)

Table 4.2 The Demographic Profile of the respondents in terms of Gender

Gender	Frequency	Percentage
Female	20	66.67%
Male	10	33.33%
Total	30	100%

Interpretation

Table 4.2 presents the frequency and percentage of the demographic profile of the respondents in terms of gender. The table illustrates that the majority of the respondents are female, and equivalent to 66.67% while male respondents are 33.33%

Table 4.3 The Demographic Profile of the respondents in terms of Educational Attainment

Educational Attainment	Frequency	Percentage
Undergraduate	19	66.33%
Degree	6	20.0%
Master's Degree	5	16.67%
Total	30	100%

Interpretation

Table 4.2 presents the frequency and percentage of demographic profile of the respondents in terms of gender. The table illustrates that the majority of the respondents are undergraduate, these respondents are those farmers (66.33%) degree holder respondents are 20%, and master's degree respondents are 16.67% that is equivalent to 5 individuals.

Table 4.4 The perceived benefits of JAANNS soap to the farmers and pet owners

Statements	Mean	Description
1. I see the effect after bathing my pets and farm animals.	3.31	Agree
2. I would recommend JAANNS soap for lice and other insects or pest prevention.	3.49	Agree
3. I recommend JAANNS soap for pets/farm animals for other farmers or pet owners.	3.59	Agree
4. I believe that JAANNS soap would improved my pets/farm animals coat health.	3.58	Agree
5. I would choose JAANNS soap for sensitive pet/farm animals skin.	3.34	Agree
6. I know that JAANNS soap reduced pet/farm animals itching or scratching.	3.54	Agree
7. I believe that JAANNS soap help to moisturize my pet/farm animals skin.	3.64	Agree
8. I prefer JAANNS soap specifically formulated for my pets/ farm animals skin problems.	3.52	Agree
9. I believe that JAANNS soap helped in removing ticks and lice on my pets/farm animal's skin.	3.52	Agree
10. I know that JAANNS soap would helped soothe skin irritated by ticks and lice.	3.52	Agree
Grand Mean	3.44	AGREE

Legends; 1.0 – 1.99 (Strongly Disagree), 2.0 – 2.99 (Disagree), 3.0 – 3.99 (Agree), 4.0 – 5.0 (Strongly Agree)

Interpretation

Table 4.4 presents the data and findings for The perceived benefits of JAANNS soap to the farmers and pet owner. To obtain the weighted mean of each statement the researchers utilized weighted arithmetic mean, and presents the statements cited form the impact of soap-based formulae among survey questionnaire. The first 10

questions determine the impact of JAANNS Soap to the Farmers and Pet Owner accordingly to the weighted mean of each statements. As can be seen in this table all of the statements have obtained 3 point plus mean for each, this implied that the respondents have agreed upon 10 statements, on the other hand the Grand Mean of these statements are **3.44** with the description Agree, which means the findings reveal that using JAANNS Soap has its impact to the Farmers and Pet Owner.

According to Bennett et al., (2020) Madre de Cacao has natural antibacterial, antifungal, and anti-parasitic properties, making it effective for treating skin issues like mange, flea infestations, and wounds. Aloe Vera enhances skin healing and moisturization, reducing irritation. Reduction in Veterinary Costs, in using a natural, affordable solution, pet owners may avoid expensive treatments for common skin problems. For Farmers Madre de Cacao helps prevent parasite infestations in livestock, improving their overall health and productivity. Economic Benefits, Healthier animals are more productive, whether in terms of milk production, meat quality, or labor. Farmers may appreciate a sustainable, chemical-free alternative for managing animal health. A soap-based formula might be more affordable than pharmaceutical treatments.

Table 4.5 The effects of JAANNS soap on the animal's skin as observed by farmers and pet owners.

Statements	Mean	Description
1. I understand that there is an improvement of skin and coat elasticity for using JAANNS soap.	3.30	Agree
2. I have seen reduced inflammation in my pets/animals using JAANNS soap.	3.67	Agree
3. I would choose JAANNS soap for pets/farm animals with skin infection.	3.88	Agree
4. I would recommend JAANNS soap for juvenile animals.	3.30	Agree
5. I have used Madre de cacao and Aloe Vera soap ingredients for my pest/farm animals with skin issues.	4.0	Strongly Agree
Grand Mean	3.63	AGREE

Legends; 1.0 – 1.99 (Strongly Disagree), 2.0 – 2.99 (Disagree), 3.0 – 3.99 (Agree), 4.0 – 5.0 (Strongly Agree)

Interpretation

Table 4.4 presents the findings for the effects of JAANNS soap to the animal skin as observed by farmers and pet owners. Based on the answers of 30 respondents, they have agreed that JAANNS Soap to the to skin of animals they have owned, likewise the last 5 statements among the survey questionnaire have obtained at least 3 point plus weighted mean with the description Agree, and the Grand Mean of these statements are **3.63**, the findings revealed that JAANNS Madre de cacao and Aloe Vera Soap-based Formulae have its effect to the animal skin.

Table 4.6 The significant difference on the perceived benefits of JAANNS soap according to the pet owners and farmers.

	N	Mean	t-value	df	p-value
Farmers	20	7.33	0.951	1.943	.005
Pet Owners	10	3.33			

Significant at $p > 0.05$

Interpretation

Table 4.6 presents the findings of t-test for the significant difference between the perceived benefits of JAANNS soap to the pet owners and farmers. As presented in the table, the t-value obtain **0.951** which lower than the degree of freedom with the value of **1.943** associated with the p-value of **0.001** which is higher than the alpha

of **0.05**, therefore this data implied that there no significant difference between the perceived benefits of JAANNS soap according to the pet owners and farmers. The findings reveal that both animals such as cat, goat and cattle owned by the pet owners and farmers can benefit with JAANNS soap which is based from Madre de cacao and Aloe Vera soap-based. The animals owned by the pet owners and farmers can both benefit from the composition of JAANNS soap. The mean for farmers are 7.33, that is higher than the means of pet owners 3.33, this according to their numbers, and therefore suggesting that the use of JAANNS soap are significantly effective for both farm and pet animals.

According to DiBarto M. J. (2019) Soap-based products like Madre de cacao and Aloe Vera soap-based formulae are commonly used in animal care for various purposes, including cleaning, grooming, and managing skin conditions. These products can be formulated from natural or synthetic ingredients and often include surfactants that help remove dirt, oils, and pathogens from the skin and fur of animals. Understanding the effects of these products is crucial for ensuring the health and well-being of animals.

SUMMARY, CONCLUSION AND RECOMMENDATIONS

This chapter presents the summary of findings, conclusions and recommendations of this study.

Summary of Findings

Questionnaires are employed on thirty (30) respondents to gather the data necessary in this study, Statistical Package for Social Science (SPSS), particularly frequency and percentage, to identify the demographic profile of the respondents, and weighted mean is employed to determine the impact of JAANNS soap on the farmers and pet owners and the effects of JAANNS soap on the animal skin.

The first 10 statements among the questionnaire have obtained 3.44 with the description Agree, which means the findings reveal that using JAANNS Soap can benefit the animal owned by the farmers and pet owners as they perceived.

On the extent of the effects of JAANNS on the animal skin, the respondents agreed to the last 5 statements and obtained a total grand mean of 3.66. The findings revealed that the JAANNS Madre de cacao and Aloe Vera soap-based formulas have the effects on the animal's skin as observed by farmers and pet owners.

For the significant difference between the perceived benefits of JAANNS soap according to the pet owners and farmers. The findings reveal that there is no significant difference, which indicates that both animals owned by the pet owners and farmers can benefit from JAANNS soap, which is based on Madre de cacao and Aloe Vera soap. The animals can both benefit from the composition of JAANNS soap

CONCLUSION

Based on the results, the researchers concluded that JAANNS Soap, with its Madre de Cacao and Aloe Vera formula, offers significant benefits to pet owners and farmers by promoting health and sustainability. While challenges like scalability and consistency exist, the potential social, economic, and environmental benefits make it a promising option for those seeking natural alternatives in pet and livestock care. As for the effect of JAANNS soap on the animal's skin as observed by pet owners and farmers, the respondents have agreed that using JAANNS soap, which is based on Madre de cacao and Aloe Vera soap, appears to be a gentle, natural solution for maintaining healthy and parasite-free skin in animals.

As for the significant difference, the researchers follow the null hypothesis and reject the alternate. The findings reveal that there is no significant difference between the perceived benefits of JAANNS soap according to the pet owners and farmers. which indicates that both animals owned by the pet owners and farmers can benefit from JAANNS soap, which is based on Madre de cacao and Aloe Vera soap-based. The animals can both benefit from the composition of JAANNS soap.

RECOMMENDATIONS

JAANNS Soap could serve as a versatile, effective, and eco-friendly solution for farmers and pet owners, addressing common skin and pest-related challenges naturally. The following recommendations are recommended based on the findings of this study:

For Farmers

Pest Control: Madre de Cacao has natural insecticidal and repellent properties. It can help protect the skin of farmers who are frequently exposed to pests and biting insects, reducing the risk of insect-borne diseases.

Skin Health: Aloe Vera is known for its soothing, moisturizing, and healing properties. It can help treat minor cuts, burns, or skin irritations that farmers may experience from manual labor. Sustainability: If the soap is biodegradable, it aligns with sustainable farming practices by reducing harmful chemical runoff into the environment.

For Pet Owners

Anti-Parasitic Properties: Madre de Cacao is widely used as a natural treatment for mange, fleas, and ticks in pets. Regular use of the soap can help control these parasites effectively without harsh chemicals. **Skin Soothing:** Aloe Vera helps relieve itching and inflammation caused by skin conditions or allergies in pets, promoting healthier skin and fur. **Gentle on Sensitive Skin:** The natural formulation is less likely to irritate the skin of pets compared to chemical-based soaps, making it ideal for sensitive breeds.

REFERENCES

1. A.S. Davidsohn (2019) Soap Chemistry and its Impact on Animals Handbook of Detergents” 65, 159-185.
2. Bennett et al., (2020) This study focused on antimicrobial soaps’ effectiveness in reducing bacterial loads on canine skin. 45(3), 231-237.
3. Cruz, J., Villanueva, D., & Santos, M. (2019). "Economic assessment of using herbal-based soaps for animal care: Cost-benefit analysis." Journal of Herbal Economics, 15(2), 85-95.
4. DiBarto M. J. (2019) Safety and Toxicity of Soap-Based Products for Animals , 83(4), 451-468.
5. Fran C. (2021) One of the benefits of using real soap is that one of the by-products of the production process is glycerine. 81(12), 712-719.
6. Johnson et al., 2019: This paper discussed allergic reactions related to commercial soap use in cats, highlighting safety considerations in product selection.
7. Lopez, J. & Ramos, L. (2021). "Survey on the preferences of natural vs. synthetic products for animal care among farmers and pet owners." Animal Welfare Science, 18(4), 156-167.
8. Natividad, S., Manalo, J., & Rivera, G. (2020). "Efficacy of Madre de Cacao and Aloe Vera soap in treating mange in dogs." Philippine Journal of Veterinary Medicine, 45(1), 28-34.
9. Sánchez, M., Morales, P., & Díaz, J. (2020). "Antimicrobial properties of Aloe Vera extracts on skin pathogens in animals." Journal of Phytotherapy and Veterinary Science, 10(1), 60-67.
10. Scott Miller (2019) Specific Uses of Soap-Based Formulae in Animal Care, a study published in 2019, 10(2), 100-102
11. Smith & Jones, (2021) This research examined how moisturizing soaps could improve hydration levels in dogs with dermatological conditions.
12. Thirumalai, R., Surendran, P., & Kumaran, V. (2019). "Anti-inflammatory and skin healing properties of Aloe Vera in veterinary use." International Journal of Veterinary Science, 7(3), 142-150.