

From Tradition to Industrialization: A Historical Study on the Transformation of Indonesia's *Jamu* Industry

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Abstract: Indonesia's exceptional biocultural richness has long sustained jamu, a plantbased healing tradition that blends empirical practice with cosmological notions of bodily balance, yet in the twentieth century jamu businesses shifted from household decoctions and itinerant vendors into branded, standardized consumer health products; this article traces that transformation through a historical case study of Tolak Angin (Sido Muncul), arguing that the transition was propelled by commodification of family recipes in the early 1900s, state recognition and regulation that framed jamu as "Indonesia's original medicine" during the post-independence decades, and late-twentieth-century modernization in technology and marketing that introduced ready-to-drink sachets, GMP/CPOTB compliance, and clinical evidence supporting OHT status while repositioning jamu as hygienic, practical, and urban-friendly; using qualitative historical reconstruction from archival and printed sources with rigorous source criticism and chronological-thematic narration, the study shows how industrialization preserved and re-signified jamu into a hybrid good—simultaneously heritage and modern therapy—delivering market expansion without severing cultural meaning; the findings imply that policy can strategically couple standards, R&D, biodiversity stewardship, and cultural branding to grow domestic and export markets and to uplift producer communities; the article's novelty lies in its historically grounded synthesis linking technological standardization, state policy, and cultural consumption to explain how a legacy remedy operationalizes Indonesia's health-heritage economy.

Abstrak: Keanekaragaman hayati-budaya Indonesia sejak lama menopang jamu sebagai tradisi penyembuhan nabati yang memadukan praktik empiris dengan gagasan keseimbangan tubuh-alam, namun pada abad ke-20 bisnis jamu bertransformasi dari godokan rumahan dan penjual gendong menjadi produk kesehatan bermerek dan terstandar; artikel ini menelusuri perubahan tersebut melalui studi kasus historis Tolak Angin (Sido Muncul), menunjukkan bahwa peralihan didorong oleh komodifikasi resep keluarga pada awal 1900an, pengakuan serta regulasi negara yang memosisikan jamu sebagai "Obat Asli Indonesia" pada era pascakemerdekaan, dan modernisasi teknologi-pemasaran akhir abad ke-20 yang menghadirkan sachet siap minum, kepatuhan GMP/CPOTB, serta bukti klinis menuju OHT sembari mereposisikan jamu sebagai higienis, praktis, dan selaras gaya hidup urban; melalui rekonstruksi sejarah kualitatif berbasis arsip dan literatur dengan kritik sumber dan penulisan kronologis-tematis, studi ini memperlihatkan bagaimana industrialisasi melestarikan sekaligus memaknai ulang jamu menjadi komoditas hibrida—warisan budaya sekaligus terapi modern—yang memperluas pasar tanpa memutus makna budaya; implikasinya, kebijakan perlu mengintegrasikan standar mutu, litbang, pelestarian biodiversitas, dan branding budaya untuk memperkuat pasar domestik maupun ekspor serta memberdayakan komunitas produsen; kebaruan artikel terletak pada sintesis historis yang mengaitkan standardisasi teknologi, kebijakan negara, dan konsumsi budaya guna menjelaskan operasionalisasi ekonomi warisan kesehatan Indonesia.



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INTRODUCTION

Indonesia possesses an extraordinary biodiversity of medicinal plants that holds great potential for the development of herbal-based industries, including jamu (traditional herbal medicine), standardised herbal remedies, and phytopharmaceuticals. With more than 30,000 plant species and abundant marine resources, the country has a natural advantage to become one of the world's leading exporters of herbal medicine. However, in practice, only around 9,600 species of plants and animals known to have medicinal properties have been utilised effectively (Dewantari et al., 2018; Nugroho, 2017). According to the Indonesian Food and Drug Authority (BPOM) regulation No. HK.00.05.4.2411 of 2004, traditional medicines in Indonesia are grouped into three categories: jamu, standardised herbal medicines, and phytopharmaceuticals. Among these, jamu represents a long-standing cultural tradition that has been passed down through generations. It remains widely consumed by Indonesians to maintain health and treat various illnesses (Dewanto, 2007). As a traditional medicine deeply rooted in local culture, jamu is considered a highly culturespecific product (Fan & Tan, 2015).

The term *jamu* refers to herbal remedies made from medicinal plants and spices, a practice that has been documented in the Indonesian archipelago since at least the 8th century CE. Etymologically, the word is believed to derive from the Old Javanese djampi, meaning "healing concoction," underscoring its primary function as a natural form of treatment (Fibiona & Nurazizah, 2015; Yulagustinus & Tridjaja, 2017). In practice, jamu is prepared from various parts of plants-roots, rhizomes, leaves, bark, and fruits-processed through pounding, boiling, or steeping. The underlying philosophy of jamu is closely tied to the balance between the body and nature: "hot" ailments are treated with "cooling" herbs and vice versa, reflecting the local wisdom of the Nusantara in using biodiversity as a source of preventive and curative healthcare.

Historically, the tradition of *jamu* has flourished alongside the development of Indonesian society. Since pre-colonial times, it has been an inseparable part of daily life, used both to treat illnesses and to maintain stamina. Traditional healers, or *dukun*, played a central role in preparing herbal remedies, and interestingly, women often mastered the skill of concocting *jamu*. This knowledge was passed down informally across generations within families and communities. Early evidence of herbal medicine use can be seen in temple reliefs—such as

the Karmawibhangga panels at Borobudur—which depict traditional healing practices, as well as in manuscripts like the Serat Centhini (1814), which records a wide variety of medicinal plants. Over the centuries, local herbal traditions have adapted to the influences of Hindu-Buddhist and Islamic cultures, and later, to interactions with the West (Beers, 2012; Fibiona & Nurazizah, 2015). Despite such cultural blending, the essence of jamu as an empirical herbal remedy endured. During the colonial period, however, traditional medicine was often dismissed by European medical professionals, who questioned its efficacy and labelled indigenous practices as unscientific. Yet, by the late nineteenth and early twentieth centuries, European interest began to grow, particularly as publications on the medicinal value of local plants emerged. Figures such as the Indo-European woman Mrs. Kloppenburg-Versteegh (1911) documented recipes and therapeutic uses of jamu, helping to bridge traditional knowledge with modern medical discourse (Pols, 2016). Since then, jamu has gradually gained wider recognition—not only as an ancestral heritage but also as a complementary alternative in healthcare services.

Entering the twentieth century, the jamu business in Indonesia underwent significant transformation (Afdhal & Welsch, 1988; Amini, 2009; Saptaningtyas & Indrahti, 2020). Previously, jamu was closely associated with jamu gendong—female peddlers carrying bottles of herbal decoctions in large baskets on their backs, selling them door-todoor in villages. This traditional distribution model began to shift with the emergence of small-scale home industries that gradually developed into large -scale factories. Some of the earliest jamu companies were established in the early 1900s, marking the beginning of modern commercialisation. For instance, Jamu Cap Jago was founded in 1918 (Listyowati, 2014), followed by Jamu Nyonya Meneer in 1919 (Alief & Aritonang, 2023). These pioneering enterprises typically began as small family ventures that expanded as consumer demand increased. Entrepreneurs of Chinese descent played a prominent role in this early wave of industrial jamu production—companies such as Nyonya Meneer, Jamu Cap Djago, Jamu Iboe, and later Sido Muncul highlight how jamu evolved from a traditional household remedy into a valuable economic commodity. During the Old Order, the Indonesian government also recognised the importance of jamu as part of the nation's identity, as reflected in Law No. 7 of 1963, which designated jamu as Indonesia's original medicine (Afdhal & Welsch, 1988). Since then, regulatory frameworks have increasingly supported the development of *jamu* alongside modern pharmaceuticals.

From the perspective of institutions and production, the *jamu* business continued to experience important transformations throughout the twentieth century (Afdhal & Welsch, 1988; Amini, 2009; Saptaningtyas & Indrahti, 2020). Between the 1970s and 1990s, the Indonesian government promoted the development and expansion of the jamu industry, enabling many household enterprises to grow into national-scale companies. One notable example is PT Industri Jamu dan Farmasi Sido Muncul, which originated from a family herbal recipe created by Ibu Rakhmat Sulistio in Yogyakarta in 1930 and began marketing Tolak Angin in decoction form in the 1940s (Saptaningtyas & Indrahti, 2020). The brand name "Sido Muncul," meaning "a dream come true," was officially adopted in 1951 when production moved to Semarang and was reorganised as a small-to-medium enterprise (Hartojo, 2023).

A major transformation in both form and business model occurred when Sido Muncul introduced Tolak Angin in liquid sachets in 1992, making it one of the pioneers of ready-to-drink herbal products in the Indonesian market (Saptaningtyas & Indrahti, 2020). This innovation was driven by the demands of urban consumers who prioritised practicality, and it marked a turning point in the image of jamu—from a "traditional" concoction often perceived as old-fashioned to a modern health product that was widely accessible. Consequently, Tolak Angin evolved beyond its role as a traditional medicine to become a consumer good with strong brand recognition. Modern packaging and marketing strategies reinforced this shift, with visual branding in advertisements simultaneously projecting modernity while referencing the cultural roots of *jamu* (Sabiq, 2019).

Why do people consume modern *jamu*? In today's era, consumers are concerned not only with a product's functional benefits but also with hygienic packaging, ease of use, and the product's image as part of a healthy lifestyle. Rogers' diffusion of innovation theory (Rogers et al., 2014) helps explain how innovations like liquid *jamu* were quickly accepted by urban consumers when supported by effective education and distribution. Likewise, the phenomenon of *disembedding*—the separation of traditional practices from their local contexts to make them widely accessible—illustrates how traditional *jamu* has been "lifted" into the realm of modern industry within Indonesia's national economy.

Against this background, the present study aims to trace the historical transformation of the jamu business in Indonesia through the case of Tolak Angin produced by Sido Muncul. The research focuses on how traditional herbal medicine has been processed, marketed, and adapted to remain relevant amid modern socio-economic dynamics. The central research questions are: (1) what factors have driven the transformation of the jamu business, (2) how have innovation and branding strategies contributed to the sustainability of modern jamu products, and (3) how has this transformation maintained connections with the cultural heritage of jamu as a marker of local identity. To answer these questions, this study combines historical analysis with a cultural business perspective in order to capture the balance between tradition and modernisation in the trajectory of Indonesia's jamu industry.

METHOD

This study on the transformation of the jamu business adopts a historical approach with a qualitative descriptive-analytical method. As a work of historical inquiry, the research seeks to reconstruct the development of Indonesia's herbal medicine industry over time in a chronological manner while analysing the driving factors behind its transformation. The primary unit of analysis is the trajectory of Sido Muncul and its flagship product Tolak Angin, which is examined within the broader context of the national jamu industry. The study relies on library research and archival exploration. Primary sources include company documents (such as records of Sido Muncul's founding and development), annual reports, historical media archives, government regulations (including laws and policies related to herbal medicine), and historical artifacts such as vintage jamu advertisements, early production photographs of Tolak Angin, and testimonies from industry actors. Secondary sources encompass historical and ethnographic works on jamu (e.g., Beers, 2012 on the art of Indonesian herbal medicine), scholarly articles on the herbal industry (e.g., Afdhal & Welsch, 1988; Witasari, 2025; Saptaningtyas, 2020), and anthropological or sociological studies of changing cultural consumption practices (e.g., Lyon, 2003; Giddens, 1990). Data collection was conducted through documentation, systematically selecting and examining relevant sources while recording key historical facts, important dates, and narratives that illuminate the transformation of the iamu business.

Data analysis followed the established steps

of historical methodology. The first stage, heuristics, involved gathering and cataloging valid sources related to the transformation of jamu. In this stage, intensive searches of literature and archives were undertaken to obtain factual data on the origins of *jamu* traditions, the rise of the industry in the twentieth century, and its contemporary developments. The second stage, source criticism, involved verifying the authenticity and reliability of each source. External criticism was used to ensure the genuineness of documents (including authorship, dating, and context), while internal criticism evaluated the credibility and consistency of content. For instance, Sido Muncul's production records were crosschecked against contemporary media reports for corroboration. The third stage, interpretation, consisted of analysing the verified data to identify patterns and causes of transformation. Here, the descriptive-analytical method was applied: historical chronology was reconstructed and analysed using theoretical frameworks such as Rogers' diffusion of innovation (2014) to explain consumer adoption of innovations like liquid jamu, as well as modernisatheory and symbolic consumerism (Baudrillard, 1998; Giddens, 1990) to interpret shifting cultural meanings of jamu in the modern marketplace. The final stage was historiography, the systematic writing of findings into a coherent narrative. These narrative traces the jamu tradition from its earliest roots, through the colonial and early industrial phases, the post-independence expansion, and into the present. Particular emphasis is placed on the evolution of Sido Muncul and Tolak Angin as a central case study, presented with proper scholarly citations to maintain historical accountability and avoid anachronism. In this way, the analysis is carefully structured to address the research questions and fulfil the objectives outlined in the introduction.

THE HISTORY OF JAMU IN INDONESIA

Indonesian society has long understood and utilised the richness of its natural environment, not only to meet basic needs such as food, clothing, and shelter but also as a means of healing illnesses. One of the most distinctive forms of this knowledge is *jamu*, a traditional herbal concoction originating from Java that is believed to both treat various diseases and strengthen the body's endurance. The term *jamu* is most commonly associated with Javanese tradition, although similar terms and practices can also be found in Madura and Bali. Etymologically, *jamu* derives from the Old Javanese word *djampi*, meaning a healing mixture or spell, reflecting its function

as a natural form of treatment (Yulagustinus & Tridjaja, 2017). Other sources also refer to the word *oesodho*, which connotes health and healing (Kusumaningrum & Hanjani, 2025). The most widely accepted definition today describes *jamu* as a traditional medicine produced by processing a variety of plants to extract their active components (Riswan & Sangat-Rumantyo, 2002).

Philosophically, *jamu* represents a worldview of harmony between the human body and its natural environment. In Javanese thought, balance is often understood through the dichotomy of "hot" and "cold": ailments categorised as "hot" are treated with "cooling" herbs, while "cold" conditions are countered with "warming" remedies, thereby restoring bodily equilibrium (Pols, 2016). This principle illustrates how *jamu* embodies local wisdom in harnessing biodiversity for health preservation.

For centuries, *jamu* has been trusted as a traditional remedy capable of addressing a wide range of illnesses. In some communities across the archipelago, it has even been regarded as more effective than modern pharmaceutical products. Historical traces of *jamu* use remain visible today, strongly tied to Indonesian cultural practices that persist in both rural and urban settings. Drinking *jamu* is not only considered a therapeutic act but also a cultural expression and a way of preserving local heritage. In many rural communities, traditional healing practices are deeply rooted, with knowledge of herbal remedies—derived from plant parts such as roots, leaves, stems, and fruits—passed down across generations (Hartati, 2011).

This practice developed naturally, as the Indonesian archipelago had long been recognised—even before the colonial era—as one of the world's main producers of spices, commodities that were not only central to trade but also deeply embedded in daily life. In the preparation of *jamu*, the rich variety of spices from across the islands became inseparable elements, creating blends that were both flavorful and medicinal, ensuring *jamu* remained a cornerstone of traditional healing (Mardiyanto et al., 2023).

When it comes to herbal ingredients, however, the range of plants used is vast and sometimes ambiguous, as almost every part of a plant can be employed. Roots, stems, tubers, leaves, fruits, and even other parts of certain species could all serve as ingredients. While rhizome-based plants were among the most common, numerous other plants were also incorporated, either as main ingredients or as complementary components in a recipe (Nurcholis & Arianti, 2024). Yet, the foundation for

using these plants was not always scientific. Many illnesses at the time were believed to have mystical causes, which meant that the correlation between specific plants and particular ailments was often uncertain (Borobudur Conservation Office, 2017).

From a historical perspective, it is also not entirely clear when jamu as such first came into use in the archipelago. It is important to distinguish between jamu in its strict sense and the broader practice of using plants as medicine. In the latter sense, herbal healing in the archipelago is undeniably ancient. In traditional medicine, the role of the dukun (shaman) or tabib (healer) was vital, though their authority was incomplete without the skill to prepare and blend medicinal plants. Some scholars suggest that women were more often the custodians of this herbal knowledge and practice (Pols, 2016). This collaboration continued as Hinduism, Buddhism, and later Islam spread into the archipelago. Although religious influences introduced shifts in healing practices, the use of plant-based medicine endured across cultural transformations (Boomgard, 1993).

Such practices were not limited to Java but spread across many parts of the archipelago, with each region drawing on its own local and endemic plants as medicine. Preparing jamu typically involves extracting active substances by pounding or boiling plants and then drinking the decoction. This extraction-based method, however, has been more developed in Java than in other regions. For instance, in pepper-producing areas such as Sumatra and Banten, people believed that pepper (Piper nigrum) functioned not only as a spice and food preservative but also as a warming agent that protected the body from illness. Yet pepper was usually consumed by mixing it into food or chewing it directly, rather than being processed into jamu (Utama, 2023). Likewise, fruits such as papaya (Carica papaya), mangosteen (Garcinia mangostana), banana (Musa), and pineapple (Ananas comosus), as well as bark like cinnamon (Cinnamomum verum), were often used as jamu ingredients or complements to existing formulas (Pols, 2016).

The *jamu* tradition in the Indonesian archipelago has deep roots reaching back to antiquity. Archaeological evidence from the Neolithic period, such as stone mortars, pounders, and grinding slabs, suggests their use in processing medicinal plants. Historical records became clearer with the arrival of Hindu-Buddhist influences, documented through temple reliefs, ancient texts, and palm-leaf manuscripts. A notable example is the Borobudur reliefs, which depict healing scenes where a man is

treated by several women—likely with herbal ointments or massage oils derived from plant extracts (Purwaningsih, 2013; Asasi, 2024). Inscriptions such as those from Candi Perot (772 CE), Haliwangbang (779 CE), and Kudadu (1216 CE) also reference traditional healing practices. This body of knowledge was preserved in later manuscripts, including the Serat Centhini (1814-1823), which catalogued medicinal plants, and the Serat Kawruh Bab Jampi-Jampi Jawi (1831), which highlighted the connection between jamu, prayers, and mystical elements—sources that may mark the first formal appearance of the word jamu. Beyond these, other written evidence is scarce, with most surviving in palace manuscripts from Yogyakarta and Surakarta that contained recipes for jamu (Sudrajat, 2016).

Indonesians widely believe that the most established traditions of herbal healing were nurtured in the royal courts of Surakarta and Yogyakarta in Central Java. Court culture was shaped by interactions with Chinese, Indian, and Arab influences, which enriched the herbal practices of the region. Scholars suggest that the use of plants for medicine in Indonesia likely began in prehistoric times, a claim supported by findings of stone tools from the Neolithic era associated with health-related activities. Implements such as mortars and grinding stones were used to crush plants into powders or extracts, forming the basis of early medicinal preparations (Beers, 2012).

In Indonesia, there is no single agreed-upon definition of *jamu*. While everyone is familiar with it, the boundaries between *jamu*, medicine, and cosmetics often vary depending on perspective. A single type of *jamu* can serve multiple purposes depending on the user's needs—ranging from a preventive herbal drink to chronic disease therapy, or in the form of infusions, distillations, and ready-to-drink remedies. Its forms are equally diverse, including liquids, pills, capsules, and powders, all believed to treat nearly every ailment known to humankind (Beers, 2012).

In its earliest history, *jamu* recipes were considered exclusive, reserved only for kings and their families, and kept secret. Some formulas were designed not only for health but also for beauty care. The royal courts of Yogyakarta and Surakarta, for example, preserved distinctive *jamu* traditions in various manuscripts. These recipes were likely not purely ancient inheritances but were enriched with additional elements from medical traditions outside Java. As royal lifestyles embraced healthier living, these *jamu* formulas gradually spread into wider society (Widjaja & Kartawinata, 2014).



Figure 1. Women making traditional *jamu* in Indonesia, early 20th century. Source: KITLV 2897

When European influence reached the archipelago, especially Java, *jamu* and medicinal plants also caught the attention of European doctors. Jacobus Bontius, a Dutch physician, famously used *jamu* to treat the Governor-General of the VOC, Jan Pieterszoon Coen. This practice was prompted by the difficulty of treating tropical diseases that commonly afflicted Europeans, such as scurvy, beriberi, cholera, and gastric ailments, alongside the long delays and spoilage of chemical medicines shipped from the Netherlands. From this point onward, Dutch interest in *jamu* grew steadily, not only as a health remedy but also as a subject of scientific study (Pols, 2009).

European medical methods differed significantly from local practices and were initially unpopular, largely because they were accessible only to elites. Some rulers, however, did engage European doctors. The Sultan of Banten once summoned a Dutch surgeon to treat his wife, while the Susuhunan of Mataram and his son received treatment aboard a VOC ship anchored in Tegal in 1677. Even Arung Palakka, a South Sulawesi noble, was treated by a VOC physician for a nasal swelling (Boomgard, 1993).

By the eighteenth century, systematic research on Indonesian medicinal plants began to take shape. Dutch botanist Georgius Everhardus Rumphius conducted extensive studies in the Moluccas, which were later published as *Herbaria Amboinensis* (1775). This interest continued into the nineteenth and early twentieth centuries, exemplified by Mrs. Kloppenburg-Versteegh, who documented herbal markets, the role of healers, and the benefits of various plants in her *Indische Planten en Haar Geneeskracht*. Dutch physicians such as Boorsma and C.L. Van der Burg also contributed to this growing field, followed by H.A. van Hien,



Figure 2. Traditional *jamu* vendor in Indonesia, circa 1910–1930. Source: https://collectie.wereldmuseum.nl/

whose *Javaansch Receptenboek* (1924) compiled traditional Javanese remedies. Collectively, these works marked the beginning of systematic efforts to study *jamu* within the framework of modern science (Pols, 2009).

When the Dutch colonial government consolidated power in the early nineteenth century, traditional medicine was far from being entirely accepted. European doctors continued to regard local healers as medically incompetent, mainly because of their different understandings of disease and treatment. Many healers in Java, for instance, still attributed illness to the intervention of evil spirits. Yet by the early twentieth century, a shift began as more Europeans became interested in traditional remedies. This change was driven by the increasing number of publications on the medicinal value of plants. Notable works included those by Gent-Dettele (1883) and Blockland (1899), with the influential being Mrs. Kloppenburg-Versteegh's Indische Planten en Haar Geneeskracht (1912), which became a key reference for subsequent researchers on jamu and herbal medicine (Widjaja & Kartawinata, 2014).

A striking feature of this literature is that much of it was written by Indo-European women. They played a pivotal role as intermediaries between Western and traditional medical systems, carefully recording *jamu* recipes and cataloguing the benefits of various ingredients. Importantly, they tended to omit mystical aspects, emphasising instead the logical and observable effects of herbs. Their records were even consulted by European doctors in the nineteenth century—for instance, ginger was noted for treating influenza, cucumbers for reducing fever, and certain herbs for alleviating tuberculosis. In many cases, Europeans gained more knowledge of *jamu* from these Indo-

European women than from local healers. For ordinary people, too, these women often became more trusted sources of care than either traditional *dukun* or European doctors (Pols, 2016). *Jamu* could be consumed alone or combined with other healing practices, such as massage. Its appeal lay in the widespread belief that, when used properly, it caused no side effects and was remarkably effective—a firmly held belief by many Javanese who considered *jamu* a potent and reliable remedy.

In the twentieth century, *jamu* began to take on a commercial character, traded both on a small and large scale. On the small scale, the iconic jamu gendong vendors emerged—women carrying bottles of their homemade herbal drinks in large baskets slung across their shoulders, selling them door-todoor. On the larger scale, jamu developed into an industry with well-known brands (Zubaidah, 2022). Interestingly, although jamu is deeply rooted in Javanese cultural tradition, many of the major companies were founded by entrepreneurs of Chinese descent, including Sido Muncul, Jago, and Nyonya Meneer (Afdhal & Welsch, 1988; Alief & Aritonang, 2023; Saptaningtyas & Indrahti, 2020). Within this industry, jamu diversified beyond its traditional liquid form into powders, pills, cosmetics, creams, and other products (Afdhal & Welsch, 1988). Its wide market reach allowed jamu to compete directly with modern pharmaceuticals, further supported by government recognition under Law No. 7 of 1963 on Pharmacy, which officially designated *jamu* as Indonesia's indigenous medicine (Afdhal & Welsch, 1988).

One milestone in this transformation came in 1918, when the Tjoeng Kwaw Suprana family founded the brand Djamoe Djago in Wonogiri. By 1937, it had been designated the official *jamu* of the Surakarta palace (Listyowati, 2014). After 1948, the factory was relocated to Semarang. Around the same time, Nyonya Meneer established her herbal medicine business in Surabaya, which grew rapidly and expanded to Jakarta (Alief & Aritonang, 2023). In 1944, the Indonesian *Jamu* Committee was formed to organise and represent herbal producers, marking the transition of *jamu* from family-based remedies to full-fledged industrial production.

By the late 1930s, medical professionals also voiced support for *jamu*. Two doctors, Abdul Rasyid and Seno Sastroamijoyo, advocated its use as a preventive measure to replace expensive imported medicines. In 1939, the Indonesian Doctors' Association (IDI) even invited traditional healers to demonstrate their practices at a conference, reflecting a growing openness within the medical commu-

nity to traditional healing arts. That same year, the First *Jamu* Conference was held in Solo, with participation from both doctors and traditional practitioners (Purwaningsih, 2013). During the Japanese occupation, when imported drugs became scarce, the consumption of *jamu* surged. From that point onward, Indonesia's herbal medicine industry entered a new phase of rapid industrial growth.

The influence of jamu on health extends beyond the physical dimension to include emotional and social well-being. As a traditional remedy long embedded in Indonesian culture, jamu provides a natural alternative believed to support holistic health. Beyond its medicinal benefits, jamu also carries significant social value, particularly through the role of women who traditionally prepared and sold it. Their involvement not only sustained family economies but also fostered networks of mutual support, especially in rural areas. Drinking jamu together during family events or community gatherings has long served as a symbol of solidarity, strengthening bonds within society. Thus, jamu functions not only as a means of maintaining health but also as a cultural glue that upholds social cohesion across generations. In modern times, its popularity has grown in tandem with rising consumer interest in natural and eco-friendly products. The "back to nature" lifestyle trend has gained momentum, especially among urban populations seeking health solutions with minimal chemical additives (Witasari et al., 2025).

Rooted in herbal and spice-based ingredients, *jamu* aligns well with this growing demand. Drinking *jamu* provides not only health benefits but also a sense of connectedness to both nature and cultural heritage. Its relatively sustainable methods of preparation make it increasingly appealing in an era of heightened environmental awareness, positioning *jamu* as both a wellness product and a cultural identity marker. By sustaining traditional values while adapting to contemporary needs, *jamu* remains relevant in modern life. Among its many innovations, one of the most successful examples is *Tolak Angin*, a herbal *jamu* product produced by Sido Muncul, which has transformed traditional remedies into a modern, widely recognised brand.

INDUSTRIALIZATION OF JAMU TOLAK ANGIN: FROM HOMEMADE DECOCTION TO STANDARDIZED HERBAL MEDICINE

The History of Sido Muncul

The long tradition of *Tolak Angin* traces its roots back to 1930, when Sri Agustina (Go Djing Nio), the wife of Siem Thiam Hie—later known as Rakh-



Figure 3. Diversifying the Tolak Angin Product Line

mat Sulistio—first began preparing herbal remedies for the common cold (*masuk angin*) at home. Initially intended for family use, this concoction became known as *Jamu Tujuh Angin*, eventually evolving into the product now recognised as *Tolak Angin* (Saptaningtyas, 2020). By the 1940s, these homemade decoctions were sold modestly in Semarang, though they had yet to rival larger established *jamu* factories.

A key milestone came in 1951, when the business was formally established under the name Sido Muncul—literally meaning "a dream come true"—at Jalan Mlaten Trenggulun No. 104, Semarang. The name symbolised the realisation of a vision to bring *jamu* production to a wider scale. This modest enterprise steadily expanded, and by 1975 it had transformed into PT Industri *Jamu* dan Farmasi Sido Muncul (Saptaningtyas & Indrahti, 2020).

In its early years, Sido Muncul carefully preserved the original recipe for *jamu masuk angin* while simultaneously introducing innovations in form and packaging. A major breakthrough occurred in 1992, when the company launched *Tolak Angin* in liquid form—becoming Indonesia's first ready-to-drink herbal medicine. The shift from parchment paper packaging to plastic sachets extended shelf life and improved hygiene standards. While the original formula was retained, new variants incorporating honey and mint were added to suit modern consumer tastes (Hartojo, 2023).

This innovation propelled *Tolak Angin* into widespread popularity, securing its position as the "Top of Mind" brand in the herbal cold remedy category. The product line was subsequently diversified into capsules, tablets, instant powders, and even aromatherapy oils in roll-on and balm forms. Such diversification strategies broadened the market reach, catering to consumers across age groups—from children to adults (Sido Muncul, 2024a).

Alongside its business growth, Sido Muncul also strengthened its production quality. The implementation of Good Manufacturing Practice (GMP)

as well as Indonesian standards for Traditional Medicine (CPOTB) and Pharmaceuticals (CPOB) ensured that Tolak Angin was no longer marketed solely as a traditional *jamu*, but elevated to the category of Standardized Herbal Medicine (Obat Herbal Terstandar / OHT). Toxicity and efficacy tests conducted in collaboration with academic institutions—such as the Faculty of Pharmacy at Sanata Dharma University, Yogyakarta, and the Biotechnology Laboratory of the Faculty of Medicine at Diponegoro University—demonstrated that Tolak Angin is safe for vital organs and effective in boosting immunity (Dharmana & Susilaningsih, 2007; Wasito, 2011).

The success of Tolak Angin is also inseparable from its modern marketing strategy. The tagline "Orang pintar minum Tolak Angin" ("Smart people drink Tolak Angin") became a legendary advertisement, reinforcing the brand's image as the intelligent choice for health. Television and radio commercials, along with large-scale billboards, expanded the product's reach across both urban and rural communities (Luhur, 2018; Sabiq, 2019).

By the late 20th and into the 21st century, Tolak Angin expanded beyond Indonesia's borders (Nawiyanto, 2016). After Sido Muncul was officially listed on the Indonesia Stock Exchange in 2013, the company entered the global market, beginning with its expansion into the Philippines in 2017. In 2019, Sido Muncul received the Best of the Best award from Forbes Indonesia and the PROPER Gold rating from the Ministry of Environment and Forestry,

MASUK ANGIN?

Lekaslah minum Djamu jg. mandjur untuk hilangkan penjakit itu. Penjakit jg. enteng kalau tida diperhatikan akan mendjadi berat.

Djamu No. 142 TOLAK ANGIN

Tjotjok sekali untuk hilangkan masuk-angin, badan greges2. Terutama sembuhkan segala sakit2 jg. disebabkan dari masuk angin, mitsalnja perut kembung dll.

Figure 4. Tolak Angin Advertisement Source: "Advertentie-Blad," 1951.

affirming its position as a modern herbal medicine producer that combines local wisdom with global competitiveness (Sido Muncul, 2024c).

Thus, the journey of Tolak Angin—from a simple family herbal decoction to an internationally standardised herbal product—illustrates a long transformation that blends traditional heritage, technological innovation, and modernisation strategies. This achievement positions Sido Muncul not only as a symbol of the modernisation of Indonesia's herbal industry but also as a cultural diplomacy icon through health products rooted in local wisdom.

Implementation of GMP (Good Manufacturing Practice)

As one of Indonesia's leading herbal medicine companies, PT Industri Jamu dan Farmasi Sido Muncul Tbk has consistently worked to deliver high-quality, reliable, and health-oriented products for consumers and society at large. Between 1997 and 2022, the company built a new factory on Jalan Raya Km 25, Ungaran, as part of its strategy to expand production and marketing capacity. In this context, marketing is not merely about selling but is understood as a social and managerial process in which individuals and groups obtain what they need and want through creating, offering, and exchanging products and services (Kotler & Keller, 2016). The goal is to build long-term, mutually beneficial relationships with stakeholders—such as customers, suppliers, and distributors—based on trust, satisfaction, and sustainable business growth (Alma, 2004).

In an increasingly competitive market, traditional herbal remedies must compete with modern health products that offer greater convenience, appealing packaging, and longer shelf life, making them more attractive to younger consumers (Adhyanggono, 2021). Traditional herbal drinks, when sold in simple liquid form without packaging innovation, often lose their appeal and risk being pushed out of the market (Utaminingrum et al., 2022). Recognising this challenge, Sido Muncul adopted a forward-looking vision by establishing a modern factory that fully complies with Good Manufacturing Practices (GMP). GMP provides guidelines for ensuring quality and hygiene across the entire production chain, from raw materials to the final consumer, so that products meet safety and quality standards demanded by the market. In the pharmaceutical industry, the successful implementation of GMP relies on strict regulatory compliance, well-designed facilities, comprehensive staff training, and effective auditing systems.

On November 11, 2000, Sido Muncul inaugurated a new, larger, and more modern factory in Ungaran, officiated by the Minister of Health at the time. The factory spans seven hectares and was equipped with modern machinery to increase production efficiency and meet the growing market demand. Supporting facilities were gradually established to meet pharmaceutical standards, including a moisture content laboratory, microbiology laboratory, physics laboratory, waste treatment facility, and several other specialised labs. Today, PT Industri Jamu dan Farmasi Sido Muncul Tbk, the producer of Tolak Angin, holds multiple certifications as proof of its strong management systems to ensure safety and quality. These include CPOTB 2021 (Good Traditional Medicine Manufacturing Practices), CPPOB 2010 (Good Processed Food Production Practices), ISO 9001:2015 (Quality Management System), ISO 14001:2015 (Environmental Management System), ISO 22000:2018 (Food Safety Management), ISO 45001:2018 (Occupational Health and Safety Management), ISO 17025:2017 (Laboratory Management), HACCP 2003 (Hazard Analysis and Critical Control Points), and SJPH (Halal Product Assurance System) (PT Industri Jamu dan Farmasi Sido Muncul, 2023; Sido Muncul, 2024b).

These certifications are an integral part of the Good Manufacturing Practice (GMP) framework, which ensures that every Tolak Angin product is produced consistently, safely, and at a high level of quality. GMP covers critical aspects such as raw material control, production processes, quality assurance, and staff training. For example, the raw materials used in Tolak Angin—such as fennel fruit extract, kayu ules, clove leaves, ginger, mint leaves, and honey (Sido Muncul, 2024a)—are sourced from trusted suppliers and undergo laboratory testing to ensure they are free from contaminants and meet strict specifications.

Sanitation and hygiene are also essential components of GMP. Cleanliness of production areas, equipment, and workers is strictly monitored to prevent product contamination, supported by rigorous cleaning protocols and regular inspections (Hartojo, 2023). Every stage of production—from raw material selection to packaging and distribution—follows standardised procedures, with detailed documentation to ensure accountability and traceability. This system not only strengthens Quality Control but also provides a clear audit trail should any production issues arise.

Quality control (QC) is an essential component of herbal medicine production and must be

applied comprehensively throughout the manufacturing process. Routine product testing is carried out to ensure that each batch meets established standards, including tests of active compound content, microbiological safety, and product stability (Klein-Junior et al., 2021; Xin-Yue et al., 2013). Recognising the importance of innovation in remaining competitive in the herbal industry, PT Industri Jamu dan Farmasi Sido Muncul has consistently pursued the development of high-quality, environmentally friendly products that serve public health needs. This commitment is reflected in the transformation of its flagship product, Tolak Angin, from a traditional herbal concoction into an Obat Herbal Terstandar (OHT). An OHT refers to a natural medicine proven safe and effective through preclinical testing, with raw materials that have been standardised (Wasito, 2011). In contrast to traditional jamu, OHT represents a more modern and scientifically validated category of herbal medicine.

Produced in GMP-certified facilities, Tolak Angin has undergone rigorous scientific evaluations, including sub-chronic toxicity tests and efficacy studies, which confirmed its role in maintaining immune function (Sido Muncul, 2024c). Clinical studies demonstrated that Tolak Angin increased the percentage of peripheral T lymphocytes, critical for immune defence, after just seven days of use (Dharmana & Susilaningsih, 2007). These scientific validations strengthened consumer trust, positioning Tolak Angin not only as a traditional remedy but as a credible modern herbal product. As a result, Tolak Angin has consistently dominated Indonesia's herbal market, securing a 75% market share in the "masuk angin" category and setting a benchmark for the modernisation of traditional herbal products.

Sido Muncul's Philanthropic Dimension and the Transformation of Its Social Role

As one of the largest herbal medicine producers in Indonesia, Sido Muncul plays a role not only in the economic and health sectors but also positions itself as a social actor consistently engaged in philanthropic practices. The company's commitment to social responsibility has long been evident and covers a wide range of community needs, from health and education to empowerment and disaster response. These practices demonstrate how an industry rooted in local tradition can align with modern social demands, creating benefits that go far beyond business profits.

One notable example of this commitment is

the empowerment of vulnerable groups. In 2015, for instance, Sido Muncul provided training in medicinal plant cultivation for fifty visually impaired individuals affiliated with PERTUNI. Through this program, they were taught how to grow ginger, galangal, lemongrass, and cinnamon, with the aim of fostering entrepreneurial partnerships. Such initiatives are important because philanthropy is not only understood as charity but also as a way of creating economic independence, especially for groups often marginalised in formal economic access ("Sidomuncul Berdayakan Anggota Pertuni," 2015).

Another aspect of social concern can be seen in large-scale, long-term initiatives. Since 1994, Sido Muncul has regularly organised free homecoming travel programs, such as in June 2017, when the company helped more than 15,000 *jamu* sellers return to their hometowns using 260 buses ("Mudik Gratis Sidomuncul Ke 28," 2017). This program not only provided practical support but also represented corporate recognition of the contribution of informal workers who help sustain the distribution of herbal medicine in communities. In this way, philanthropy also strengthens the emotional bond between the company and small-scale economic actors.

Sido Muncul's contribution is evident in the health sector through its free cataract surgery program. From 2011 to 2017, more than 50,000 eyes were treated across 27 Indonesian provinces. One such event took place in October 2017 in Kulonprogo, in collaboration with the Indonesian Ophthalmologists Association (PERDAMI) ("Komitmen PT Sidomuncul Tangani Lebih 50.000 Mata Katarak," 2017). This initiative shows that philanthropy can directly impact improving people's quality of life, not only by alleviating suffering but also by restoring social and economic opportunities for those freed from blindness caused by cataracts.

Sido Muncul's commitment was equally visible during times of national crisis. In April 2020, when the COVID-19 pandemic struck Indonesia, the company donated Rp 15 billion in the form of health products, basic food packages, cash assistance, personal protective equipment, and even rapid test facilities ("Sidomuncul Menyiapkan Dana 15 Milyar Perangi Covid 19," 2020). The aid was distributed not only to government institutions but also directly to communities across various regions. In the same month, residents in Bekasi received 1,000 food packages worth Rp 270 million as part of the company's humanitarian support. This quick action demonstrated how corporate philanthropy can serve as a tool for social mitigation in times of

emergency.

Equally important was Sido Muncul's concern for victims of disasters and national tragedies. In April 2021, the company provided Rp 650 million in aid for victims of flash floods in East Nusa Tenggara, and another Rp 720 million for the families of the crew of the KRI Nanggala 402 submarine that sank in Bali waters. The company donated Rp 1 billion to orphans and underprivileged groups in West Java, East Java, and Yogyakarta ("Sidomuncul Sumbang 1 Milyar Untuk Dhuafa," 2021). These contributions illustrate how Sido Muncul's philanthropy operates on two levels: long-term programs through empowerment and health initiatives, and short-term responses to urgent national crises.

Taken together, Sido Muncul's philanthropy is not a ceremonial practice but a social strategy rooted in humanitarian values that also strengthens the company's place in society. Through training, donations, health operations, free homecoming travel, and disaster relief, the company has shown that business sustainability is measured not only in profitability but also in its ability to build social solidarity. Sido Muncul thus stands as an example of how a company grounded in local tradition can play a vital role in fostering care networks aligned with modern society's needs.

Industrialisation and the Culture of Drinking *Iamu*

The history of *jamu* in the Indonesian archipelago reflects a long-standing tradition of plant-based healing rooted in local wisdom. Since prehistoric times, *jamu* has emerged from the abundant biodiversity of rhizomes and spices, serving not only as medicine but also as a philosophy of balance between the human body and nature—a cosmological worldview that continues to shape traditional health practices in Indonesia.

Historical traces of *jamu* can be found in temple reliefs, ancient manuscripts, and royal court records that preserved exclusive recipes for the nobility. Women played a central role, both as herbalists and sellers, embedding gendered and social dimensions into this tradition. The arrival of Hindu-Buddhist, Islamic, and later European colonial influences enriched the practice, although Western medicine initially dismissed local healers. Yet, 19th-century Indo-European women documented the empirical benefits of *jamu*, helping to bridge indigenous traditions with modern knowledge.

A major transformation occurred in the 20th century when *jamu* entered the commercial sphere. The figure of the *jamu* gendong (women carrying

herbal concoctions for door-to-door sales) represented traditional distribution. At the same time, companies such as Sido Muncul, Jago, and Nyonya Meneer marked the industrial era of *jamu*. The shift from fresh decoctions to powders, pills, capsules, and liquid extracts reflected adaptation to consumer needs. State recognition through pharmaceutical regulations further reinforced *jamu*'s status as Indonesia's "authentic medicine" within national health policies.

The case of Tolak Angin, produced by Sido Muncul, illustrates how *jamu* successfully adapted to modern demands. From a simple family decoction, it evolved into a ready-to-drink herbal product with hygienic packaging and international certification. The implementation of Good Manufacturing Practices (GMP) and innovative packaging enabled Tolak Angin not only to dominate the domestic market but also to compete globally. This modernisation shows that *jamu* can thrive by blending empirical tradition, technological innovation, and effective marketing strategies.

Public perception of *jamu* has undergone a significant shift alongside changes in social structure, technological advances, and lifestyle trends. Once associated mainly with traditional forms and the image of *jamu* gendong, it has now been modernised in production, packaging, and distribution. The emergence of instant sachets and bottled *jamu* reflects innovation tailored to contemporary consumers, particularly urban populations who value mobility, efficiency, and practicality (Witasari, 2025).

The distinction between traditional and modern *jamu* lies in its physical packaging and its implications for distribution, product longevity, and legitimacy within the modern health market. In the past, *jamu* gendong was sold in glass bottles and bamboo baskets with limited distribution and a short shelf life. In contrast, modern packaging enables wider marketing reach and enhances competitiveness in the health and pharmaceutical industries.

This phenomenon illustrates how the *jamu* industry has adapted to shifting consumer preferences while simultaneously absorbing values of modernity into broader consumption culture. As Anthony Giddens explains, modernity is characterised by "disembedding mechanisms" that lift social practices out of traditional contexts and re-situate them within wider systems (Giddens, 1990). The modernisation of *jamu* can be understood as such a process of disembedding, where a health product rooted in local knowledge is transformed into a

modern commodity accessible across time and space.

In contemporary society, people consume not only the practical benefits of a product but also the symbols and images attached to it. In the case of *jamu*, consumption has shifted from traditional healing functions to representations of practicality, hygiene, and compatibility with an urban lifestyle (Baudrillard, 2016). Thus, the modernisation of *jamu* signifies not only product innovation but also a broader paradigm shift in how society perceives it—moving from a locally grounded traditional remedy to a health product integrated into modern and global lifestyles.

Within this modern context, innovation has become crucial for sustaining the relevance and competitiveness of the *jamu* industry. Changing consumption patterns show consumers are increasingly selective, paying close attention to quality, safety, and health benefits in their purchasing decisions (Kotler & Keller, 2016). Modern consumer behaviour is shaped by perceptions of value, both functional and symbolic.

In response, *jamu* producers are compelled to innovate, particularly in packaging and taste, to appeal across generations, especially to younger consumers. Whereas *jamu* was once associated with bitterness and a pungent aroma that did not suit younger tastes, producers now employ flavour diversification and modern processing technologies to preserve bioactive compounds without sacrificing palatability. This aligns with diffusion of innovation theory, which suggests that the survival of traditional products in competitive markets depends on their ability to innovate and be accepted by new consumer groups (Rogers et al., 2014).

Innovation in packaging has become just as crucial as taste in attracting consumers. Today, jamu products are available in practical forms such as ready-to-drink bottles and instant sachets, making them more convenient for mobile lifestyles and expanding consumer access. Modern packaging not only broadens the market segment for jamu but also demonstrates how traditional remedies can adapt to contemporary health trends and modern lifestyles that prioritise efficiency and convenience. As Giddens notes, modernity is characterised by social reflexivity—the ability of both society and industry to continually adapt to changes in social structures and consumer preferences (Giddens, 1990). When people consume modern jamu, they are not simply seeking health benefits but also the image of being "natural," "practical," and "trendy" as constructed by the industry. This reflects how

jamu has shifted into a lifestyle commodity rich with symbolic meaning.

The modernisation of *jamu* also signals a transformation in the meaning of consumption. For urban consumers, *jamu* is no longer seen merely as a traditional medicine but as a healthy lifestyle product that is hygienic, convenient, and aligned with the "back to nature" movement. Theoretical perspectives from Giddens on modernity and Baudrillard on consumption suggest that people now seek not only functional benefits but also the symbolic and cultural values attached to products. Thus, modern *jamu* carries a dual meaning: it serves as both a therapeutic remedy and a symbolic commodity representing identity and contemporary lifestyle.

Beyond its health functions, *jamu* also holds significant socio-economic dimensions. The tradition of preparing and selling *jamu* has long supported social networks, especially in rural communities. At the industrial level, Sido Muncul demonstrates how a company rooted in local tradition can play a social role through philanthropy. Programs such as empowering vulnerable groups, providing free cataract surgeries, organising mass homecoming trips, and delivering disaster relief highlight that business sustainability is measured not only by profit but also by tangible social contributions.

In the global context, *jamu*'s relevance has grown alongside the rising popularity of natural health products and increasing environmental awareness. *Jamu* is now valued not only as an alternative form of treatment but also as a cultural identity marker with potential as an instrument of Indonesian cultural diplomacy. In this way, *jamu* bridges tradition and modern innovation, linking the past with the future.

Overall, *jamu* represents a dynamic entity reflecting the interplay of tradition, modernity, and globalisation. Its survival depends not only on its therapeutic effectiveness but also on its ability to adapt to shifting social, economic, and cultural landscapes. The case of Tolak Angin illustrates how innovation, certification, and philanthropy have ensured *jamu*'s continued relevance in the competitive health industry. For this reason, *jamu* deserves recognition not only as a cultural heritage but also as a pillar of sustainable health industries that reinforce Indonesia's identity and competitiveness in the global era.

CONCLUSION

This study shows that the transformation of *jamu* in Indonesia—examined through the case of Tolak

Angin by Sido Muncul—illustrates a shift from empirical tradition to modern industrialisation based on scientific standards. The key findings highlight how traditional recipes passed down for generations have endured through innovations in form (from decoctions, powders, to ready-to-drink liquids), product diversification, and the application of Good Manufacturing Practices (GMP) alongside CPOTB/CPOB certification. Historically, this industrialisation not only safeguards local wisdom but also establishes *jamu* as both a cultural identity marker and a tool of global competitiveness. Today, modern jamu, particularly Tolak Angin, stands as a symbol of hybridity—bridging tradition and modernity while reflecting Indonesia's cultural adaptability in the face of globalisation.

That said, the study has its limitations. The analysis focuses mainly on one major company, leaving out alternative narratives from small and medium-scale jamu producers. Archival gaps and limited historical production data also made it difficult to conduct quantitative analysis on the scale of the industry. Future research should therefore expand the scope by comparing transformations across different brands and regions, incorporating socio-economic perspectives of small producers, and exploring ecological as well as cultural diplomacy dimensions of jamu on the international stage. In this way, the history of jamu can be written more comprehensively—not just as a corporate success story, but as a collective journey of the Indonesian people in safeguarding health, culture, and biodiversity.

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