

The Art Ecosystem of *Amreta ing Huma*

I Gusti Ngurah Diva Ismayana^{1*}, I Wayan Mudra², I Ketut Sariada³

^{1,2,3}Institut Seni Indonesia Bali, Indonesia

*Corresponding Author: divafungi26@gmail.com

Abstract: *Amreta ing Huma* is an art ecosystem whose ideas sparked the subak phenomenon and its current existence. By linking culture, society, education, politics, technology, economics, and stakeholders, it can become an alternative way of thinking for Balinese society, both nationally and internationally. This paper is compiled based on the results of fieldwork through a qualitative approach, namely the implementation of interview methods accompanied by direct observation, the process of transcribing information in the form of field data, processing data to compiling data into a systematic and coherent data report. The aesthetic approach used is that of Clive Bell and William Morris, along with a sustainable ecological art approach. *Amreta ing Huma*, interpreted as the water of life in rice fields, is a product of thought in the form of an art ecosystem. The achievement of an art ecosystem begins with the creation of the *Amreta ing Huma* artwork, ecological art, which ultimately forms an art ecosystem. Based on this artwork, a role model for interaction within the community is established through the perspectives of culture, education, politics, economics, and stakeholders.

Keywords: art ecosystem, *Amreta ing Huma*, subak, ecological art

History Article: Submitted 7 June 2025 | Revised 30 July 2025 | Accepted 11 January 2026

How to Cite: Ismayana, I. G. N. D., Mudra, I. W., & Sariada, I. K. (2026). The Art Ecosystem of *Amreta ing Huma*. *Journal of Aesthetics, Creativity and Art Management*, 5(1), 65-83. <https://doi.org/10.59997/jacam.v5i1.6215>.

Introduction

Every cultural policy must be designed with the arts and culture ecosystem in mind. This is especially true in Bali, where arts and culture are a crucial focus of Balinese culture. This cultural and artistic entity, deeply embedded in the community from ancient times to the present day, is the basis for this island province's rise to global popularity through its cultural tourism paradigm (Mudana *et al.*, 2018; Mudana *et al.*, 2023a; Mudana *et al.*, 2023b; Mudana *et al.*, 2024).

The arts ecosystem encompasses the mutually supportive interactions between stakeholders, actors, participants, the environment, and arts and cultural objects within a region. The UNESCO Framework for Cultural Statistics (FCS) defines a cultural ecosystem as having five subsystems: creation, production, dissemination, exhibition/reception/transmission, and consumption/participation. All elements of this subsystem are interconnected and involve diverse cultural actors. Indonesian culture is a valuable heritage that must be preserved sustainably. Indonesia has 10 objects of cultural advancement: oral traditions, manuscripts, customs, rituals, traditional knowledge, traditional technology, art, language, folk games, and traditional sports. By 2023, Indonesia will have 1,941 intangible cultural heritage sites. This heritage represents a treasure trove of arts and culture ecosystems, which constitute the social capital of the Indonesian nation (<https://budbas.data.kemdikbud.go.id/>).

Subak, as a World Cultural Heritage, was recognized by UNESCO in 2012 (Febriantini *et al.*, 2019; Susila, 2019; Puspitasari *et al.*, 2025). This is a source of great pride for the people of Indonesia, and Bali in particular. However, due to changing times, the existence of subak is being questioned again. Subak degradation in several areas of Bali is due to land conversion (Brata & Sartika, 2024; Pramudiasari, 2024; Widiartana & Yustiawan, 2025). The continued decline in rice paddies, especially in urban areas, is a major problem. This has led some communities to worry about not being able to meet their needs, leading to a shift in professions and a growing reluctance among the younger generation to participate in subak.

Professor I Wayan Windia, emeritus of the Faculty of Agriculture at Udayana University, Bali, was a keen advocate for subak. He was known for his vocal support for any damage to subak. His intervention also earned him UNESCO (United Nations Educational, Scientific, and Cultural Organization) recognition as a Balinese cultural heritage site in 2012. He was furious when the Tabanan Regency Government built a helipad in the Jatiluwih subak, strongly protesting it, arguing that it constituted subak exploitation. He did not hesitate to ask UNESCO to revoke the subak's status as a world cultural heritage site due to its deplorable condition.

Subak was originally defined in Bali Regional Regulation No. 2 of 1972 (Geria *et al.*, 2019). It states that a subak is a customary law community with socio-agrarian-religious characteristics, consisting of farmers' associations that manage irrigation water in rice fields. Subak was later defined in accordance with Bali Regional Regulation No. 9 of 2012. Subak is defined as a traditional organization in the field of water management and/or crop management at the farming level in Balinese indigenous communities, which is socio-agrarian, religious, and economic in nature and has historically continued to grow and develop. The definition mentioned in the regulation seems inappropriate, as it is not operational in its implementation in the field. Even in Regional Regulation No. 9 of 2012, economic aspects/components are included in the definition of subak. This is inappropriate, because subak is not actually an economic institution, but a socio-cultural institution. If subak were defined as an economic institution, then all subak in Bali would have to be disbanded, as it is indeed unprofitable. However, it must be noted that subak is indeed important to provide economic activities to meet the challenges of the era of globalization with its highly competitive, individualistic, and capitalistic nature. Therefore, it would be better to define subak as a farmer organization that manages irrigation water that is socio-agrarian and religious in nature, in a certain rice field area with natural boundaries, has one or more irrigation water sources, has a subak temple, and is autonomous both externally and internally.

However, whatever the definition of subak, it has remained alive and operating in Bali for the past 10 centuries (Ardana *et al.*, 2024; Risna *et al.*, 2024; Zen *et al.*, 2024). Subak has even played a crucial role in supporting agricultural development, particularly during the New Order era. During the New Order, the concepts of Bimas, Inmas, Insus, and others were developed to increase rice production in Indonesia. All of these programs utilized subak as their operational

foundation. Ultimately, what is crucial in every regulation governing subak is what we can provide to the subak. If there is nothing clear that we can provide to the subak so that it can continue to exist, then the regulation on subak will be of little use (Wandia *et al.*, 2018).

Reflecting on the subak phenomenon and its existence, it is interesting to do something that can inspire the community. The art ecosystem is one solution offered to the community through mutually supportive interactions between stakeholders, actors, participants, the environment, and the chosen art objects. *Amreta ing Huma* is an art ecosystem based on ecological art, specifically the use of clear glass waste materials, colored wine bottle waste (upcycled glass), and ceramics as a medium for creating hydroponic artworks that aim to voice the phenomenon of subak and its existence. It is necessary to narrow down that *Amreta ing Huma* is a product of thought in the form of an art ecosystem as well as an ecology-based artwork as a role model tool in approaching the community.

Methodology

This paper is based on fieldwork results using a qualitative approach, including the implementation of interview methods accompanied by direct observation, the process of transcribing information in the form of field data, processing the data, and compiling it into a systematic and coherent report. Qualitative methods are used to understand a person or community from their perspective (emic) (Mistortoify, 2002). The data sources used in this paper are respondents and written data such as textbooks and scientific journals. The research technique employed is observation based on the author's direct experience during research with artists, community leaders, and subak managers. Observation maximizes the researcher's ability to observe facts on the ground. Furthermore, the research technique utilizes unstructured interviews for greater flexibility, intensity, and depth (Sentosa, 2022). Technically, the interviewer asks questions spontaneously to informants in a natural and informal atmosphere. The questions asked revolve around the scope of the research focus, in this case, the arts and culture ecosystem and the ecology of the subak.

Results and discussion

The *Amreta ing Huma* ecosystem begins with the creation of ecological artwork as a cultural object located in a mutually supportive interaction space between stakeholders such as: social institutions or foundations that are oriented towards subak and its existence. The creation of *Amreta ing Huma's* work methodologically uses the following stages of the thinker S.P. Gustami (2007).

The *Amreta ing Huma* ecosystem begins with the creation of ecological artwork as a cultural object located in a mutually supportive interaction space between stakeholders such as: social institutions or foundations that are oriented towards subak and its existence. The creation of *Amreta ing Huma's* work methodologically uses the following stages of the thinker S.P. Gustami (2007).



[Source: S. P. Gustami, 2024]
Figure 1. Stages of Art Creation

The creative method is a systematic way of creating a work of art. The stages of art creation outline the design of the artwork creation process, according to the stages of the work, from inspiration (idea), design, to the realization of the artwork. Bruce Metacalf argues that the reinvention and transformation of contemporary craft art are at odds with the business realm, especially if someone creates craft art as a personal expression (Raharjo, T., 2009). This representation is a process of spiritual exploration in an effort to uncover creative ideas for craft art creation. Gustami (2007) adds that in the past, craft art could be considered a representation of low art, while craft represented high art.

The method of creating *Amreta ing Huma's* work methodologically uses the stages of craft art creation from the thinker SP Gustami. Gustami divides it into three stages, namely: (1) exploration, (2) design, (3) embodiment. *Amreta ing Huma's* work is carried out based on the exploration creation stage, which includes two steps, namely: (a) depicting the soul of field observations, and digging up reference sources and information, to find themes or various issues. *Amreta ing Huma's* work is produced through field observations related to the existence of subak and the dilemmas that occur today. Based on these observations, the depiction of the soul examines the transformation spaces when the existence of subak is questioned again these days. Reviewing references and field research, digging up information. (b) controlling theoretical foundations, sources, references, and visual references, which can be used as analysis materials. Data collection and references are in the form of scientific articles, textbooks related to subak, hydroponic farming techniques, and art in *Amreta ing Huma's* work. The following steps in the exploration stage are: data processing and analysis. Data collection for *Amreta ing Huma's* work was obtained through several methods such as: observation, interviews, and parameter data (comparison).

The collected data was analyzed, resulting in a synthesis, resulting in a design concept for ecological art. The design concept for this ecological artwork draws on the soul's wanderlust in a space that questions the existence of subak and its dilemmas, depicting it as a small oasis, a small world in the rice fields.

The atmosphere of rice fields filled with rice and secondary crops with an intercropping system, rice embankments with flowing water inundating the fields. Rice seeds ready to be planted are arranged in a corner of the rice field. This entire atmosphere fills the imagination with ideas ready to be translated into sketch form.

The design stage involves conveying the results of the exploration or data analysis into various alternative sketches, then determining the selected design or sketch and using it as a reference in creating the final design and technical drawings. The final design, in the form of details and perspectives, serves as a reference in the process of realizing *Amreta ing Huma's* work. The two steps in the design stage include: (a) translating ideas or concepts from verbal descriptions of the analysis into two-dimensional design boundaries. The idea stems from a detailed design concept, outlined in sketches. Several sketches refer to the design concept, titled "*Amreta ing Huma*" (water of life in the rice fields). (b) Visualization of ideas from selected alternative sketch designs or technical drawings of *Amreta ing Huma's* works, which have been prepared into a prototype model.



[Source: Ismayana, 2024]

Figure 2. Several sketches of ecological artworks from the *Amreta ing Huma* art ecosystem.



[Source: Ismayana, 2024]

Figure 3. Sketch of the selected ecological work named *Amreta ing Huma*.

The realization stage, which involves transforming the selected or final design into a prototype model until the work is perfectly aligned with the design or idea. This stage involves realizing the work after going through the exploration and design stages, making the creation process easier.

The realization stage includes (a) implementation based on the prototype model deemed perfect, including final completion, and (b) assessment or evaluation of the completed implementation results. The realization stages of *Amreta ing Huma's* work are as follows:

1. Prepare selected sketches and technical drawings.
2. Prepare upcycled glass, both green and clear. The green glass is obtained from used wine bottles from Potato Head Village in Kuta. Potato Head Village is a tourist destination with several venues, including restaurants, hotels, beach clubs, and others, all of which uphold sustainable and green concepts. Meanwhile, the clear glass is obtained from glass waste in the form of windows, doors, tableware, and other items.
3. Prepare the clay material to be used to make ceramic pots.
4. The green glass is processed using a glassblowing technique, forming it into a free-form, organic shape, typically spherical. The spheres are approximately 12 cm in diameter. Once completed, the green glass spheres are drilled with a grinder to create free-form, circular holes for placing microgreen plants.
5. Upcycled glass waste was processed using a glassblowing technique. Three tubes were formed, each 24 cm in diameter and 50 cm high. A 1.2 cm hole was drilled 3 cm from the top of the tube. A 1 cm diameter, 28 cm long aluminum rod was inserted into the hole, finished in moss green.
6. Another clear glass waste was processed into a glass dome, 22 cm in diameter and 25 cm high. A hole was then drilled at the top to

accommodate the aluminum rod, connecting the glass tube and dome through the hole inserted in the aluminum rod.

7. Clay was processed into ceramic pots.

Microgreens (vegetables harvested at a very young age, 7-14 days after sowing) were selected, including: wheatgrass, pea shoots, green mustard, red cabbage, coriander, and sorrel.

After the collection of *Amreta ing Huma's* works was completed, an evaluation was carried out by making a checklist with several points, such as: 1) the suitability of the work with the sketches and technical drawings, 2) The advantages and disadvantages of using upcycled glass and ceramic materials, and microgreens plants, 3) Availability of materials in production, if produced in large quantities because it uses waste materials. Notes in each of the points above are things that must be considered in the stages of creating *Amreta ing Huma's* artwork.



[Source: Ismayana, 2024]

Figure 4. *Amreta ing Huma's* ecological artwork (water of life in the rice fields)

The concept of *Amreta ing Huma*, translated from Sanskrit as "water of life in the rice fields," is ecological art, a sustainable, environmentally-based art that forms a cycle. The ecological art in *Amreta ing Huma's* work represents the image of sustainable, environmentally-based art through the use of waste materials, particularly glass waste, ceramic materials in two techniques: glazed and unglazed, microgreens, and various growing media in hydroponic art. Hydroponic art encompasses the art of growing plants without using soil, where the soil is replaced by water. Hydroponics is also known as soilless culture, or cultivating plants without soil. Hydroponic art as a whole displays the uniqueness of the plants and the containers used, meaning that it does not use conventional containers but rather is based on fine art. This artwork can become a treasure trove of Indonesian culture, particularly Balinese culture.

The ecological art concept described in *Amreta Ing Hum's* work is as follows. The material used is predominantly upcycled glass, one of the many types of solid waste that is processed in such a way as to increase its value. Like other waste, glass waste has no economic value. The characteristics of glass waste offer the

potential for reuse in products because even broken glass retains the same properties as new glass: transparency, resistance to chemical reactions, and a high melting point. In addition to the properties of glass that support its reuse, the price of glass waste is very low compared to new glass. Amreta Ing Hum's work utilizes glass waste into artwork using a blowing technique, but the technique itself can be further explored. The glass waste used comes from green wine bottles and clear glass waste from broken windows, doors, and other glass. The availability of green glass waste is obtained from Potato Head Village, a beach club in the Kuta area, which is concerned with the eco concept (environmentally friendly), while clear glass waste is obtained from several glass shops as well as household waste, hotels, restaurants and others.

Ceramic clay material with two techniques: an unglazed interior and a glazed exterior. Both techniques are used to meet the needs of hydroponic art, ensuring the interior absorbs water, allowing optimal root growth, and retaining water on the exterior.

Hydroponic art growing media: hydroton, and hydrogel. Hydroton is a hydroponic growing medium processed by heating at temperatures exceeding 1000 degrees Celsius. It is made from heated clay and forms spheres varying in size between 1 cm and 2.5 cm. These spheres contain pores that absorb water (nutrients), maintaining nutrient availability. Hydroton maintains a neutral and stable pH and offers adequate aeration. The spherical (non-angular) shape reduces the risk of root damage, and the space between the spheres promotes oxygen supply. Hydroton can be used repeatedly, just wash it from dirt/moss/algae if you want to use it for further planting and it is environmentally friendly.

Another growing medium made from hydrogel, derived from the word "hydro" (water), means a gel that can absorb and store water hundreds of times its weight. Hydrogel functions to absorb water and nutrients for plants and slowly releases them according to the plant's needs. Hydrogel can be naturally decomposed by microbes into water, carbon dioxide, and nitrogen components. Therefore, hydrogel is safe to use. The raw material for hydrogel is usually a natural polymer in the form of starch obtained from grains, making it biocompatible, biodegradable, and environmentally friendly.

Microgreens are vegetable plants harvested at a very young age, 7-14 days after sowing. The vitamins and phytochemicals found in microgreens are higher than in mature plants. Microgreens contain vitamins A, C, and E, as well as polyphenols, which have antioxidant and anti-inflammatory effects. Furthermore, microgreens offer nutritional benefits, fighting free radicals, easing the workload of the kidneys, lowering bad cholesterol (LDL), and reducing the risk of Alzheimer's disease. The types of microgreens plants used in *Amreta ing Huma's* work include: Wheat grass, Pea Shoot, Red Veined Sorrel, Red Cabbage, Cilantro, Onion.

With a background in ceramic art and other materials combined with the idea of a subak igniter and its current existence, it creates an image of an exploratory space that is poured into the wandering of the soul until the realization of the work *Amreta ing Huma* (water of life in the rice fields). The

author's imagination is closely linked to a small oasis of living water in the rice fields, the flow of stagnant water in the rice fields, the splash of water from small stones in the ditch, rice plants ready to be planted, intercropping around the embankment, and small animals such as: tin crossfish, frogs, dragonflies, and others. The atmosphere or atmosphere as a whole is displayed in *Amreta ing Humā's* ecological artwork made from waste glass and ceramics as a response to environmental issues. The achievement of sustainable and circular art is achieved by intensively displaying *Amreta ing Humā's* work in public spaces. The form of *Amreta ing Humā's* work collection according to the sketch consists of three works, each of which has the same basic visual, namely: clear waste glass tubes, clear inverted dome-shaped glass, green waste glass bottle spheres, aluminum iron, hydroton and hydrogel planting media, and microgreens plants. What distinguishes them is the composition of green waste glass spheres, types of plants, planting media, insects made of copper. The form of *Amreta ing Humā's* series of works is as follows.



[Source: Ismayana, 2024]

Figure 5. *Amreta ing Humā's* Upcycled Glass and Ceramic Hydroponic Art.

Analysis of *Amreta ing Humā's* work, based on ecological art inspired by the subak (subak) system, is now manifested in three compositions (#1, #2, and #3). Each composition has its own aesthetic. Clive Bell's (1914) opinion on the aesthetics of artwork serves as a reference for analyzing *Amreta ing Humā's* work. For Bell, every aesthetic teaching must be based on subjective experience of art. Bell even defined a work of art as an object that evokes a specific type of emotion (aesthetic feeling) in the mind of the viewer. Each line and color arranged in a specific way, the shape and relationship between certain shapes are aesthetically moving; this is what Bell called Meaningful Form. Meaningful Form is a common characteristic of every work of art (Bell 1914). Meaningful Form, in Bell's understanding, is the arrangement of the formal components of a

work of art so that the work triggers aesthetic emotions in the mind of its viewer. Thus, a work of art can be defined as an object containing meaningful form.

A work of art is defined as something that triggers aesthetic emotions based on its formal structure. *Amreta ing Huma's* artwork fills the personal imagination space for the audience or viewer besides being examined formally (art elements and principles of art). When someone enjoys *Amreta ing Huma's* artwork, they are only able to appreciate the formal dimension of the work for a few minutes, the rest of the time the viewer tends to float in their personal imagination about the psychological impression of the artwork "water of life in the rice fields" which is implemented with an ecological art-based concept. In contrast, *Amreta ing Huma's* work is interpreted as applied art. If examined from the literal meaning of the word hydroponics alone without linking it to the word art, it will be interpreted differently. But when interpreted in one idiom, a work of art is born. Referring to the opinion of William Morris (1979), namely that every product of human creation, no matter how simple and everyday, has artistic quality as a work of art. Likewise, *Amreta ing Huma's* work is in line with Morris's thoughts. *Amreta ing Huma's* artwork was born in the capitalist era, but the author considers *Amreta ing Huma's* artwork to be the result of the author's creation, however simple and everyday, has artistic quality as a work of art, as well as an expression of human happiness in work. The material embodiment of that happy work is a work of art.

The achievement of aesthetic harmony in *Amreta ing Huma #1's* work through formalist components, namely elements of fine art that include points, lines, shapes or volumes, planes, spaces, dark and light, colors, textures and values and principles of art that include unity, balance, rhythm, emphasis, proportion, and clarity. The selection of shapes tends to be round and cylindrical so that it can be seen from all directions with each point of view having its own aesthetics. Unity, rhythm, proportion and balance are achieved by placing three hydroponic art pots made from green glass wine bottle waste in an organic round shape with air holes, where microgreens plants of the red cabbage, pea shoot, and green mustard and an inverted dome hanging with the selection of wheat grass microgreens. While the dark and light art elements are obtained from the effect of placing hydrogel and hydroton planting media in green glass wine bottle waste pots. The smooth texture of the clear waste glass tube creates a bright and clear impression, so that the overall atmosphere of *Amreta ing Huma #1* (water of life in the rice fields) is captured by the viewer or art connoisseur. The choice of replica materials for dragonflies perched on aluminum iron and wasps perched on the edge of the clear waste glass tube is made of copper with a gold finish and the choice of microgreens plants emphasizes clarity (emphasis).



[Source: Ismayana, 2024]

Figure 6. *Amreta ing Huma's* work #1, Upcycled Glass and Ceramic Hydroponic Art.

Amreta ing Huma's work #1 is divided into several parts: (1) a dome-shaped piece of clear glass waste made using the blowing technique, measuring 18 cm in diameter and 22 cm in height, with holes of 1.2 cm in the left and right sides; (2) a tube-shaped piece of clear glass waste made using the blowing technique, measuring 52 cm in height and 24 cm in diameter, with holes of 1.2 cm in the left and right sides; (3) a green wine bottle waste processed into a hydroponic pot with microgreens such as red cabbage, pea shoots, green mustard, and wheatgrass, perforated at various points. This gives the composition a distinct expression. (4) Ceramic pots are a separate or distinct part of the composition of clear waste glass tubes and green waste glass wine bottles. Ceramic pots represent a space for storing water in the soilless culture system and also serve as an aquaponics or *mina tani* space (a sustainable agricultural system that combines aquaculture and hydroponics in a symbiotic environment).

The character of glass waste material has the potential to be reused into a product, because glass waste that has become fragments, still has the same properties as new glass, namely clear, translucent, resistant to chemical reactions, and also has a melting point to high heat. The process of making *Amreta ing Huma* #1's work is divided into three techniques, namely: blowing technique for making pots from green wine bottle waste, printing technique on tubes from clear glass waste, and throwing technique for making ceramic pots. The raw materials for *Amreta ing Huma* #1's work utilize glass waste items collected from various places such as obtained from building shops and also from scavengers. Likewise, green wine bottle glass waste is collected from wine bottles that are no longer used by guests at Potato Head Village, a public space that has several types of venues such as: beach clubs, restaurants, and hotels.

Amreta ing Huma's work #1 is a hydroponic art pot made from green wine bottle waste made using a blowing technique. Waste from wine bottles is first crushed then sorted according to color, then cleaned and then put into a melting furnace. After that the glass is heated at a temperature of 1200 degrees Celsius

for approximately 12 hours, so that it turns into a liquid that resembles hot lava and is then taken using a special tool. A lump of liquid glass is taken then put into a tool commonly called a "mal" while being blown and rotated. After the desired object is formed, it is then put back into the cooling oven overnight. The next day, the formed glass is removed for finishing with a grinding tool for the cutting or shaping process. After that, *Amreta ing Huma's* work #1 is sanded or smoothed the surface of the cut or shaped glass by making holes. Next, the dome-shaped glass tube and tube are made using a molding technique that includes several stages, such as: cutting the glass, placing the glass on the mold, melting, removing the glass from the mold, finishing.

The hydroponic art pot in *Amreta ing Huma's* work #1 is made of ceramic material with a throwing technique. The stages of manufacture include: 1) material processing, 2) forming ceramics with a turning technique and using 3 kg of stoneware material plus marbling soil/soil that has been mixed with 500gr of FE dye, 3) drying the ceramics 4) first stage firing. In the first stage, the ceramics are fired for 9 hours at a temperature of 900 degrees Celsius. After reaching that temperature and time, the ceramics should not be taken immediately. Because, the ceramics will experience a drastic temperature change (thermal shock) from a hot oven to room temperature. Usually, to reach that temperature, it takes two days and two nights, 5) finishing stage with an offwhite dye technique 6) second firing. The ceramics are fired again to make them stronger. This second firing is carried out at a temperature of 1,220 degrees Celsius for 10 hours.

The aesthetic harmony of *Amreta ing Huma #2's* work through formalist components, namely the elements of fine art that include points, lines, shapes or volumes, planes, spaces, light and dark, colors, textures and values and principles of art that include unity, balance, rhythm, emphasis, proportion, and clarity. The selection of shapes tends to be round and cylindrical so that it can be seen from all directions with each point of view having its own aesthetics. Unity, rhythm, proportion and balance are achieved by placing wheat grass microgreens plants as well as red cabbage, pea shoot and green mustard microgreens plants in the dome-shaped clear glass waste section that is hung upside down. Meanwhile, the dark and light art elements are obtained from the effect of placing hydrogel and hydroton planting media in green wine bottle waste glass pots. The smooth texture of the clear waste glass tube produces a bright and clear impression, so that the overall atmosphere of *Amreta ing Huma #2's* work (water of life in the rice fields) is captured by the viewer or art connoisseur. The choice of replica materials for dragonflies perched on aluminum iron and wasps made of copper placed at the base of a clear glass waste tube with a gold finish and the choice of microgreens plants emphasizes clarity (emphasis).

The embodiment of *Amreta ing Huma's* work #2 is divided into several parts, namely: (1) clear glass waste in the form of a dome made using a molding technique, with a diameter of 18 cm and a height of 22 cm, with holes on the left and right sides with a diameter of 1.2 cm, (2) clear glass waste in the form of a tube made using a molding technique, with a height of 52 cm and a diameter of 24 cm, with holes on the left and right sides with a diameter of 1.2 cm. (3) Green wine bottle waste is processed into a hydroponic pot with red cabbage, pea shoot,

green mustard and wheat grass microgreens, with holes at different points. This gives a different expression to the composition of the work. (4) Ceramic pots are a separate part of the composition of clear glass waste tubes and green wine bottle waste glass, ceramic pots represent the space where water is stored in the soilness culture system.



[Source: Ismayana, 2024]

Figure 7. *Amreta ing Huma's* #2 Upcycled Glass and Ceramic Hydroponic Art.

Waste glass material has the potential to be reused as a product. Even broken glass retains the same properties as new glass: it is clear, translucent, resistant to chemical reactions, and has a high melting point. The creation process for *Amreta ing Huma* #2 involves two techniques: a molding technique for creating tubular and dome-shaped hydroponic art pots, and a throwing technique for creating ceramic pots. The raw materials for *Amreta ing Huma* #2 utilize waste glass collected from various sources, such as hardware stores and scavengers. *Amreta ing Huma* #2, a hydroponic art pot made from clear glass waste, is created using a molding technique that involves several stages: cutting the glass, placing the glass in a mold, melting it, removing the glass from the mold, and finishing.

The hydroponic art pot in *Amreta ing Huma's* work #2 is made of ceramic material with a throwing technique. The stages of manufacture include: (1) material processing, (2) forming the ceramic using a throwing technique and using 3 kg of stoneware material plus marbling soil/soil that has been mixed with 500gr of FE dye, (3) drying the ceramic, (4) first stage firing. In the first stage, the ceramic is fired for 9 hours at a temperature of 900 degrees Celsius. After reaching that temperature and time, the ceramic should not be taken immediately. This is because the ceramic will experience a drastic change in temperature (thermal shock) from a hot oven to room temperature. Usually, to reach that temperature, it takes two days and two nights, (5) the finishing stage with an off-white dyeing technique, (6) the second firing. The ceramic is fired again to make it stronger. This second firing is carried out at a temperature of 1,220 degrees Celsius for 10 hours.

The aesthetic harmony of *Amreta ing Huma #3*'s work through formalist components, namely the elements of fine art that include points, lines, shapes or volumes, planes, spaces, light and dark, colors, textures and values and principles of art that include unity, balance, rhythm, emphasis, proportion, and clarity. The selection of shapes tends to be round and cylindrical so that it can be seen from all directions with each point of view having its own aesthetics. Unity, rhythm, proportion and balance are achieved by placing two green glass wine bottle wastes through organic round hydroponic art pots with air holes, where pea shoot and green mustard microgreens are planted. An inverted dome made of clear glass waste is hung with the selection of wheat grass microgreens. While the dark and light art elements are obtained from the effect of placing hydrogel and hydroton planting media on green glass wine bottle waste pots. The smooth texture of the clear glass waste tubes produces a bright and clear impression, so that the overall atmosphere of *Amreta ing Huma #3*'s work (water of life in the rice fields) is captured by the viewer or art connoisseur. The choice of replica materials for dragonflies perched on aluminum iron and wasps made of copper placed at the base of a clear glass waste tube with a gold finish and the choice of microgreens plants emphasizes clarity (emphasis).

The embodiment of *Amreta ing Huma's* work #3 is divided into several parts, namely: 1) clear glass waste in the form of a dome made with a molding technique, with a diameter of 18 cm and a height of 22 cm, the left and right sides are perforated with a diameter of 1.2 cm, 2) clear glass waste in the form of a tube made with a molding technique, with a height of 52 cm, a diameter of 24 cm, the left and right sides are perforated with a diameter of 1.2 cm. 3) Green wine bottle waste is processed into a hydroponic art pot with microgreens pea shoot, green mustard and wheat grass plants, perforated with different points. This gives a different expression to the composition of the work. 4) Ceramic pots become a separate or separate part of the composition of clear waste glass tubes and green wine bottle waste glass, ceramic pots represent the space where water is stored in the soilness culture system.



[Source: Ismayana, 2024]

Figure 8. *Amreta ing Huma's* work #3: Hydroponic Art, Upcycled Glass and Ceramics.

Amreta ing Huma's work, "Water of Life in the Rice Fields," is presented with a minimalist display concept that includes an exhibition space with a minimalist industrial atmosphere. The exhibition space, with its minimalist industrial atmosphere, reflects the subak in the rice fields and its current existence, which has undergone changes through the conversion of land into buildings. The author invites viewers/connoisseurs to experience the social phenomenon of subak and its existence through *Amreta ing Huma's* work, which is based on ecological art. Citing Clive Bell's thoughts on aesthetic teachings, he defines artwork as an object that evokes a specific type of emotion (aesthetic feeling) in the viewer. Similarly, *Amreta ing Huma's* work (Water of Life in the Rice Fields) serves as an artistic expression of the "small oasis" of the rice fields and subak, represented by hydroponic art pots. The overall atmosphere of the artwork is expected to create an aesthetic experience for the viewer that is based on subjective experience of art.

Art has a unique ability to make abstract concepts clear. Emotional connections can lead to greater awareness and, therefore, a shift in perspective on the future. *Amreta ing Huma's* sustainable art, with its narratives about the subak and its current existence, along with its deeply emotional imagery, plays an indispensable role in promoting a sustainable vision within the community. Sustainability in art, the use of waste glass materials and environmentally friendly practices, are appropriate strategies for addressing environmental issues. *Amreta ing Huma's* sustainable art extends beyond materials and methods to serve as an effective catalyst for achieving specific outcomes, such as political change and social responsibility, with the goal of raising awareness and inspiring action.

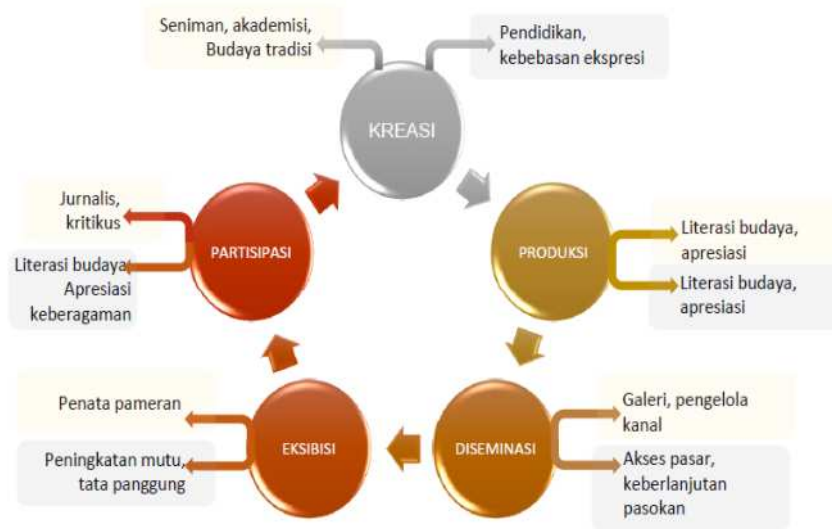
The role of sustainable art in fostering cultural change can also be considered by artists. Art can showcase sustainable lifestyles and practices, presenting them as desirable and achievable. With recycled and sustainable materials, significant works of art can be created without causing environmental harm. Therefore, it is increasingly beneficial to share and engage with the entire community through the display of artworks in public spaces focused on sustainability to encourage discussion, collaboration, and community initiatives aimed at environmental conservation. Sustainable art also aims to critique excessive consumerism and throwaway culture. In the future, it will be increasingly important to reconsider our consumption habits and the social norms that promote waste. In essence, art serves as both a mirror and a beacon, reflecting the current state of the world while also illuminating the path to a more sustainable future.

The overall strategy of art and sustainability is based on several components such as: social field and art management so that a sustainable art ecosystem can be created. The Social Art Field, also called the social network of people who work together, occurs through the convention of shared knowledge in doing something, producing works of art that can be accepted by the art public. The art field is a relationship between all artists and art lovers who are jointly involved in all forms of art activities with a broad and unlimited scope that is in tune with the steps of the development of the art world. In addition to mastering the social

field in art, it is also necessary to understand art management as the fulfillment of the creation of an art ecosystem, especially in the work of *Amreta ing Huma*, Upcycled Glass and Ceramic Hydroponic Art. Art management can help artists understand the implications of actions or steps taken in art activities. Art management plays a very important role in every action that is planned, implemented until the final result of a strategy in art activities including the management of art organizations.

There are five basic functions of management: (a) Planning, (b) Organizing, (c) Directing, (d) Implementing, (e) Controlling (Terry, 1958; Dakhi, 2016; Faiz *et al.*, 2024; Pratama, 2020). Ecological art is an artistic and sustainability strategy that is the way of thinking of *Amreta ing Huma's* hydroponic art, Upcycled Glass and Ceramics. The use of environmentally friendly and sustainable materials means they can be reused and can increase social, economic, ecological, and cultural values.

The authors chose the concept of ecological art based on waste glass (upcycled glass) and ceramics, named *Amreta ing Huma*. Etymologically, *Amreta* in Sanskrit means water, *Ing* means in, and *Huma* means rice field. *Amreta ing Huma* is a concept of mutually supportive interaction between stakeholders, actors, participants, the environment, and cultural arts objects within a region. The concept is implemented through the creation of ecological artworks with the idea of igniting subak and its existence. *Amreta ing Huma* ecological artworks are expected to be cultural arts objects that can interact among creators, participants, the environment, and stakeholders related to subak and its existence.



[Source: Ismayana, 2024]

Conclusion

The *Amreta ing Huma* art ecosystem began with the creation of ecological artworks based on upcycled glass and ceramics in response to the subak phenomenon. These artworks then served as a model for the artist's responsiveness to engage the public in understanding the social phenomenon. The community's response, as an indicator of the growing space for interaction,

subsequently led to interactions between stakeholders, such as institutions/foundations/associations focused on environmental issues, and the government, responding to the actions of the artists and the community.

Amreta ing Huma's artwork is defined as something that triggers aesthetic emotions based on its formal structure and fills the personal imagination of the audience or viewer, beyond formal analysis. Those who enjoy *Amreta ing Huma's* artwork are only able to appreciate the formal dimension for a few minutes; the rest of the time they tend to drift into their personal imagination about the psychological impression of the artwork, "water of life in the rice fields." The *Amreta ing Huma* art ecosystem refers to the cultural system model based on the UNESCO Framework for Cultural Statistics, which has five subsystems: creation, production, dissemination, exhibition, and participation.

References

- Ardana, P. D. H., Suparwata, D. O., Sudrajat, A., Chatun, S., & Harsono, I. (2024). The role of Bali's traditional subak farming system in the preservation of natural and cultural resources. *West Science Nature and Technology*, 2(01), 31-38.
- Bell, C. (1914). *Art. Stokes*. University of Michigan.
- Brata, I. B., & Sartika, L. D. (2024). Museum Subak: Menjaga Identitas Budaya Agraris Di Tengah Gempuran Alih Fungsi Lahan Pertanian Di Bali. *Jurnal Santiaji Pendidikan (JSP)*, 14(2), 134-143.
- Dakhi, Y. (2016). Implementasi POAC terhadap kegiatan organisasi dalam mencapai tujuan tertentu. *Warta Dharmawangsa*, (50).
- Faiz, M., Suciamy, R., Zaskia, S., & Kusumaningrum, H. (2024). Implementasi POAC dalam Manajemen Pendidikan Modern. *Reflection: Islamic Education Journal*, 1(4), 26-36.
- Febriantini, K. T., Indriani, N. K., Kusuma, B. O., & Yuniari, N. K. Y. (2019). Sinergitas pemerintah desa dan kelembagaan lokal subak dalam mewujudkan pembangunan berkelanjutan berbasis subak sebagai warisan budaya dunia (Studi kasus: Subak Jatiluwih, Kabupaten Tabanan). *Spirit Publik: Jurnal Administrasi Publik*, 14(2), 189-202.
- Geria, I. M., Sumardjo, N., Sutjahjo, S. H., Widiatmaka, N., & Kurniawan, R. (2019). Subak sebagai Benteng Konservasi Peradaban Bali. *AMERTA*, 37(1).
- Gustami, S. P. (2007). *Butir-Butir Mutiara Estetika Timur: Ide Dasar Penciptaan Seni Kriya Indonesia*. Yogyakarta: Prasista.
- Mistortoify, Z. (2002). *Bahan Ajar Fieldwork I Etnomusikologi*. Surakarta: Proyek DUE-Like STSI Surakarta dan Direktorat Jenderal Pendidikan Tinggi.
- Morris, W. (1979). *Arts and Crafts Movement: A Study of Its Sources, Ideals, and Influence on Design Theory*. Mit Pr. United States.
- Mudana, I. G., Gusman, D., & Ardini, N. W. (2023a). Implementation of tri hita karena local knowledge in uluwatu temple tourist attraction, Bali, Indonesia. *International Journal of Professional Business Review*, 8(11), 44. <http://dx.doi.org/10.26668/businessreview/2023.v8i11.4072>.

- Mudana, I. G., Ginaya, G., Gusman, D., & Ardini, N. W. (2023b). Kuta and the Implementation of Cultural Tourism: The Popularity of Beach Resort Strengthened by Balinese Art and Cultural Attraction. *Russian Law Journal*, 11(5), 1831-1848.
- Mudana, I. G., Suamba, I. B. P., Putra, I. M. A., & Ardini, N. W. (2018). Practices of Bali Tourism Development, Threefolding, and Tri Hita Karana Local Knowledge in New Order Indonesia. *Journal of Physics: Conference Series*, 953(1). <http://dx.doi.org/10.1088/1742-6596/953/1/012108>.
- Mudana, I. G., Wijaya, I. N. C., Ginaya, I. G., Gusman, D., & Ardini, N. W. (2024). Application of Soft Systems Methodology Approach to Find Sustainable Gastronomic Solutions in Bali, Indonesia. *Academica Turistica-Tourism and Innovation Journal*, 17(2). <http://dx.doi.org/10.26493/2335-4194.17.179-194>.
- Peraturan Daerah Bali No. 9 tahun 2012 tentang Subak.
- Pramudiasari, N. K. (2024). Pariwisata Menyempitkan Ruang Hijau: Dampak Ekspansi Villa Terhadap Keseimbangan Tata Guna Lahan Di Bali. *Jurnal Pacta Sunt Servanda*, 5(1), 7-17. <https://doi.org/10.23887/jpss.v5i1.5363>.
- Pratama, R. Y. (2020). Fungsi-fungsi manajemen "POAC.". Universitas Jenderal Achmad Yani, 2(4), 76-78.
- Puspitasari, A., Rangga, M., Wicaksono, T. P., & Luerdi, L. (2025). Indonesia's cultural diplomacy in introducing subak and spice routes at World Water Forum 2024. *JOELS: Journal of Election and Leadership*, 6(1), 9-21. <http://repository.lppm.unila.ac.id/id/eprint/54004>.
- Raharjo, T. (2009). *Metode Penciptaan Seni*. Institut Seni Indonesia Yogyakarta. Yogyakarta: Tonil Press Yogyakarta.
- Risna, R. A., Rustini, H. A., Buchori, D., & Pribadi, D. O. (2022). Subak, a nature-based solutions evidence from Indonesia. *IOP Conference Series: Earth and Environmental Science*, 959(1). https://doi.org/10.1088/1755-1315/959/1/012030?urlappend=%3Futm_source%3Dresearchgate.net%26utm_medium%3Darticle.
- Sentosa, G. (2022). Ngilo dan Meuli Sebagai Improvisasi Idiomatik Pada Pelaguan Teks Wawacan. *Jurnal Sorai*, 1-10. <https://doi.org/10.33153/sorai.v15i1.4460>.
- Susila, I. G. (2019). Implikasi Pasang-Surutnya Dukungan Terhadap Warisan Budaya Dunia Subak Jatiluwih Tabanan, Bali. *Journey: Journal of Tourismpreneurship, Culinary, Hospitality, Convention and Event Management*, 1(2), 45-58.
- Terry, G. R. (1958). *Principles of Management*. Richard D. Irwin, Inc.
- Widiartana, K. A., & Yustiawan, D. G. P. (2025). Problematika Alih Fungsi Lahan Pertanian Menjadi Lahan Permukiman di Bali Dalam Perspektif Hukum Indonesia. *Jurnal Media Akademik (JMA)*, 3(10). <https://doi.org/10.62281/4hgn6x10>.
- Windia, W. (2018). Kebertahanan Subak di Era Globalisasi. *Jurnal Bappeda Litbang*, 1(2).
- Zen, I. S., Surata, S. P. K., Titisari, P. W., Ab Rahman, S. A., & Zen, S. (2024). Sustaining subak, the balinese traditional ecological knowledge in the

contemporary context of Bali. *IOP Conference Series: Earth and Environmental Science*, 1306(1). https://doi.org/10.1088/1755-1315/1306/1/012034?urlappend=%3Futm_source%3Dresearchgate.net%26utm_medium%3Darticle.