

EDUPRENEURSHIP: UTILIZATION OF AGRICULTURAL WASTE AS A MEDIUM FOR CULTIVATING VOLVARIELLA VOLVACEA MUSHROOMS**I Made Ardika Yasa, I Made Sutajaya, I Gusti Putu Sudiarta**

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gussudiarta@undiksha.ac.id**Abstract**

This study discusses descriptively qualitatively how edupreneurship utilizes agricultural waste in the cultivation of Volvariella Volvacea mushrooms so that it becomes one of the business opportunities. This is one of the follow-up community service activities in the form of dharmatula in Kuranji village, Gerung District, West Lombok Regency, West Nusa Tenggara Province related to increasing the effectiveness and productivity of agricultural products by utilizing agricultural waste. To be able to create jobs, reduce the increase in the amount of agricultural organic waste, increase the value and benefits of agricultural waste, and provide education of entrepreneurial spirit to the younger generation. In this case, the author also describes in detail how to breed and market the results of the cultivation of the mushroom Volvariella Volvacea. This article also discussed the calculation of production costs and opportunities for cultivating Volvariella Volvacea mushrooms so that it can be ascertained that mushrooms have economic value because if done correctly it only takes 3 months to return business investment capital. Through edupreneurship, it is also expected to be an alternative solution to overcoming agricultural waste while empowering the younger generation to become entrepreneurs.

Keywords: Edupreneurship; Limbah pertanian; Jamur Volvariella Volvacea.**INTRODUCTION**

In this post-pandemic era, it is a time for the rise of society to fight the downturn to build a better economy after the last two years have been hit by problems caused by the pandemic that attacked the public health sector which affected all lines of life both in terms of the education, tourism, social and economic sectors all disrupted so that people returned to the position below the poverty line. The lack of public insight, especially for the younger generation, to take advantage of technological sophistication to support entrepreneurial activities makes business opportunities seem to be increasingly invisible (Saxenian, 2000).

This spurs educational institutions to be able to foster and produce young people who have an entrepreneurial spirit so that later when they graduate from school they will become entrepreneurial provisions if they are not able to work following the field of education pursued during school (Hariyanto, 2017).

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In this digital era, all forms of business will not be limited by space and time so that there should be no more humans who at productive ages do not have jobs and no more people are living below the poverty line, but limited wawasana, abilities, entrepreneurial skills make it seem as if technological advances cannot do much to support the improvement of the community's economic level (Mardhiyah, Aldriani, Chitta, & Zulfikar, 2021). Thus, entrepreneurship education is needed that provides more value in the implementation of education with a system of building the mindset of students to be able to be independent and have the spirit to compete in the world of work later when graduating from the level of education passed (Kuratko, 2005).

Therefore, it is very necessary to instill the value of edupreneurship to foster an entrepreneurial spirit. Reflecting on this phenomenon, thus emerged the concept of entrepreneurship which is expected to be able to support educational institutions to produce creative, innovative, insightful, and entrepreneurial young people to reduce poverty and unemployment rates (Arief, 2018).

In addition to the problem of unemployment, the problem of waste also needs to be considered by an entrepreneur who will carry out business activities because production activities will produce waste or garbage even though it is organic waste, for example, such as waste or garbage produced from agriculture so as not to let the waste cause environmental pollution that can harm others (Halik, Perdana, & Prasnowo, 2016). It would be even better how an entrepreneur can think about processing waste that is not worth selling into something that has selling value.

To have the skills or ability to process waste into production products of selling value, edupreneurship is needed. Likewise, this article discusses the edupreneurship utilization of agricultural waste as a medium for cultivating *Volvariella volvacea* mushrooms.

Volvariella volvacea mushroom or known as Nerang mushroom is the first type of mushroom that can be cultivated commercially because in addition to having a variety of nutrients that are needed by the body is also one of the food ingredients in the form of vegetables that are very popular with the people of Indonesia so that there are various processed mushroom products spread throughout the archipelago to maintain the availability of mushrooms (Hayati, 2011). So that the selling value remains stable, it is necessary to cultivate. Mushroom cultivation is one of the entrepreneurs that is very easy and does not require large capital or large land but provides opportunities for very promising results (Andjani & Fielano, 2016).

The cultivation of this mushroom is very easy to carry out in the territory of Indonesia because the air temperature is very supportive for the growth of all types of mushrooms including *Volvariella Volvacea* mushrooms but this effort requires patience, accuracy, and commitment because this mushroom must not be wrong in compounding seeds or late to be harvested because if you mix the wrong composition for the formation of seedlings it will not produce superior mushrooms, Likewise, if the harvest is late, the fungus will rot, and if the wrong way or treatment when harvesting will cause the harvest to be unsustainable.

Thus, socialization and community service are needed that provides education in cultivation to the process of harvesting and marketing the mushroom. Thus, it is felt that a follow-up is needed for the implementation of edupreneurship-based entrepreneurship education that has been carried out by the author during the implementation of community service in Kuranji village, Gerung District, West Lombok Regency, West Nusa Tenggara province related to increasing the effectiveness and productivity of agricultural products by utilizing agricultural waste into an Edupreneurship article that would be useful for the public. Many people, especially the younger generation, can create jobs and reduce unemployment in Indonesian citizens in productive age (Kencana & Elvianti, 2021)

RESEARCH METHODS

This study uses descriptive qualitative research methods so that article can explain in detail about education in the cultivation of *Volvariella volvacea* mushrooms by utilizing agricultural waste that is processed in such a way that it can produce *Volvariella volvacea* mushroom production and in this article also explained the details of expenditure costs for production activities to the calculation of estimated profits to be obtained from the production results based on the results experiments and observations carried out from March 14 - May 5, 2023, in the city of Mataram are carried out in a relatively homogeneous room with an area of 3.5 m x 4.5m (Amali Putra & Octova, 2017).

The tools and materials used are bran (mashed rice husks), straw from rice waste, yeast tape, urea fertilizer, powdered lime, water, bamboo, used cardboard, rice sacks, wire, sprayer (water spray), indicator paper, nails, hammers, meters, scales, barrels/tubs, mobile cameras. This research was conducted as a follow-up to the service activities that have been carried out in Kuranji Hamlet, Gerung District, West Lombok Regency as a vehicle for education, processing or utilizing agricultural waste into a medium for cultivating *volvariella volvacea* mushrooms so that they do not have a selling value to have a value that can create jobs for the creative young generation. The stages of the process of implementing activities are explained in the discussion section.

RESULTS AND DISCUSSION

A. Edupreneurship

Edupreneurship forms the character of an entrepreneurial spirit that can influence human attitudes and behavior in carrying out activities in the world of education. Edupreneurship is one of the programs for fostering the basic concept of entrepreneurship by providing case examples and their application to educational activities, using various business strategies, and taking into account the nature of products and market segments they have determined to serve. The term entrepreneur is not just an entrepreneur because the empowered object is required to have a better value in terms of insight, knowledge, skills, and expertise something different so that it has a plus value compared to entrepreneurs in general.

Entrepreneurs must be able to turn objects that previously had no selling value into benta or valuable items through a recycling process, based on innovation and creativity in utilizing business opportunities. Based on an understanding of edupreneurship, this coaching process is nothing but to change the mindset that

Entrepreneurship is not just a myth but a real thing whereas an example of the parable that building construction can also be learned through the process of learning, training, simulation, and intense internship (Sangadah, 2019).

The concept of edupreneurship in books (Budiarto et al., 2018) Emphasis is placed on a creative or innovative effort applied by educational institutions to improve school performance and increase income. The thought is that through actions or efforts to improve the quality and achievement of the school, although it can not directly produce a profit in terms of material or financial, with the improvement of school achievement and quality, the school will be able to easily get the opportunity to achieve appreciation and prestige both in terms of appreciation, assistance, and acceptance of students who are better than the previous student admissions.

Schools that have capital in terms of achievement will progress so that they can become superior schools. Although in this context, schools that obtain superior predicates are not necessarily able to have a significant impact on financial improvement directly, it will be a strong foothold as a first step to pioneering a more successful future because if the school has obtained superior predicates, the opportunity, and opportunity to obtain additional income will be easier.

It needs to be taken into consideration in the thinking of the business world that many countries have spurred their educational institutions to explore the concept of edupreneurship, which in this case is based on the basic concept of corporate principles that strive to "develop innovative products and services to fill opportunities that have not been touched by government-run schools" (Ibda, 2018). Edupreneurship is one alternative to create a change in the world of education to be able to produce graduates who are not only in terms of large quantities each period, but produce graduates who have quality so that they can compete in making positive and useful contributions to the community (Pelipa & Marganingsih, 2019).

B. Mushroom *Volvariella Volvacea*

1. Characteristic

Volvariella Volvacea mushrooms mostly have a shot diameter of about 5 cm to 14 cm. With a shape that can be observed as physically resembling an egg that tends to be round but slightly convex, these characteristics are seen if the fungus is old. This fungus has a dark brown to gray color and is protected by a sheath without negative chemical contamination.

In terms of color, several color variations dominate this fungus based on age conditions including; the *Volvariella Volvacea* mushroom will have a white color if the age of fungus is still young and will change color to red if the spores of this fungus reach adulthood and the older this fungus will change color to grayish brown and even blackish if it is too old and will undergo a decay process.

Volvariella Volvacea mushroom consists of a stalk and a hood where the stalk of *Volvariella Volvacea* mushroom has an average length of 3 cm to 8 cm, and a wide width of the hood diameter of 5 mm to 9 mm, with a distinctive shape that is likely to be fat on the base stalk, white and smooth textured even slippery.

Volvariella Volvacea mushrooms will experience the best growth if they are in waste that has liquid properties. *Volvariella Volvacea* mushroom is known as a warm mushroom, because of its fairly good adaptability even though it is in a place that tends to be relatively high, which is approximately 30 ° C to 38 ° C. *Volvariella Volvacea* mushroom will grow optimally if it is at room temperature 35 ° C. In general, the

Volvariella Volvacea fungus has biological characteristics including in the category of plants that have septal hyphae, with its sexual phase through the process of forming basidiospores in the basidium with a mace shape, after that phase passes it will enter the basidiocarp stage, which is the stage of fruit phase formation where this phase will form Volvariella Volvacea mushrooms into plants that resemble umbrellas consisting of stems and hoods. The fertilization phase will be successful if the gills can attach to the basidium.

2. Nutritional Content

In addition to its delicious taste the volvariella volvacea mushroom which is one type of vegetable plant that resembles an umbrella, it turns out to store a variety of vitamins, minerals, and good nutrition as important nutrients needed by the human body, including N-free carbohydrates, crude protein, low fat, and crude fiber. Based on information quoted from the US Department of Agriculture 100 mg of Volvariella Volvacea mushrooms contain nutrients: Water (89.9 grams), Calories (133 kcal), Protein (3.83 grams), Fat (0.68 grams), Carbohydrates (4.64 grams), Fiber (2.5 grams), Sodium (384 mg), Calcium (10 mg), Iron (1.43 mg), Magnesium (7 mg), Phosphorus (61 mg), Potassium (10 mg), Zinc (0.67 mg), Selenium (15.2 mcg) and Folate (38 mcg) (Wulandari, 2020).

3. Benefit

Vorvariella Volvacea mushroom is one type of vegetable that is included in the criteria for anti-cholesterol foodstuffs, as well as natural anti-oxidants because it contains protein, adequate antibiotics to overcome anemia, and has a good content of eryitadenine as an antidote. In addition, volvariella volvacea mushrooms contain potassium and calcium, and iron that is sufficient to be able to keep bones not easily porous and form muscle mass, besides the content of zinc, calories, protein, fat, and carbohydrates in Volvariella volvacea mushrooms are also able to increase energy, maintain endurance, to maintain muscle contractions, balance hormones that have an impact on improving sperm quality and quantity. To facilitate digestion and metabolism, it is recommended to consume at least 35 grams of mushrooms per day because in Volvariella Volvacea mushrooms contained various nutrients that are good for the body.

C. Agricultural Waste

The problem of waste, if discussed, will be endless because as long as humans are still carrying out life activities, of course, it will not escape from producing a waste both organic and non-organic waste where the waste is more popular with the term waste, where if waste or garbage is not recycled or processed in such a way and handled properly, it will harm the environment.

Likewise, agricultural waste, although most of it is in the form of organic waste used as animal feed, it also needs to be processed and recycled to have more beneficial values such as organic compost or planting media. Because not few farmers do not understand in processing agricultural waste so those who previously intended to reduce the amount of waste and make it more useful cause air pollution, for example by burning haystacks that have dried after the rice harvest, in addition to causing air pollution also harms motorists.

If the area of land where straw is burned is on the side of the road the smoke produced from the combustion process will disturb the driver's visibility so that it is prone to causing accidents and disturbing the health of the respiratory tract of the surrounding population and if the waste is disposed of in the irrigation canal it will have negative impacts such as clogging irrigation canals, polluting water purity, producing unpleasant odors due to decay of the waste.

In the experiment in this article, agricultural waste used in the cultivation of *volvariella volvacea* mushrooms is husk media and post-harvest rice straw which is processed in such a way as to become a planting medium for this *volvariella volvacea* mushroom. In the cultivation of *volvariella volvacea* mushrooms or marang mushrooms, agricultural waste is very important in its role, namely as a planting medium the practice of cultivating *volvariella volvacea* mushrooms, this can be done with planting media made of basic materials such as; (a) Straw, (b) Husk, (c) Corn Donggel, (d) Coconut husk, (e) Remaining grated sago, (f) Empty oil palm bunches and so on.

Agricultural waste in addition to being used as animal feed can also be processed into planting media for marang mushrooms by sterilizing and fermenting first for 4-8 days in the following ways; The first stage is to choose straw that has dried and is still intact in the sense that it has not decayed, the second stage is the sterilization process stage, namely straw after sorting and selecting, it is washed with clean water and then sprinkled with lime powder and left in a tub or storage barrel in a closed position for 24 hours after it is washed clean, the third stage, namely the fermentation process, is the determining stage for the success of agricultural waste into planting media where in this process In sterilized it is drained and sprinkled with a mixture of yeast powder, tape, and urea fertilizer and allowed to stand for 4-8 days, after which it is wrapped/tightly closed.



Figure 1 Collecting Post-harvest Rice Straw for Mushroom Growing Media
Source: I Made Ardika Yasa Documentation

D. Processing of Growing Media

1. Kumbung

In mushroom cultivation, a container is needed to put planting media which is usually shaped like a shelf consisting of several stacks which are often known as beetles. However, in some areas, Kumbung is a place where mushroom cultivation media is shaped like para-para or a kind of hut made of woven bamboo and the walls are covered with plastic sheeting material to regulate the temperature and maintain the

humidity of the growing media in the fermentation process, during the growth period until the mushroom harvest period.

Inside the beetle, there are usually 4-5 shelves, each shelf consisting of several levels with a width of 0.5 meters, a length of 3 meters, and a height of 2 meters which is used to place mushroom planting media. Kumbung can also be made permanently with iron frame material or in the form of a room made of concrete/wall with an ideal size of 3 meters high, 5 meters wide, and 7 meters long to accommodate 4-5 bed racks made of bamboo and equipped with an electric blower to regulate air circulation in the room so that mushrooms get sufficient oxygen supply and equip the room with space heaters and portable lights to regulate the ideal temperature inside beetles because fungi will develop well at temperatures of 31 oC to 34oC.



Picture 2 Beetle as a place for mushroom planting media
Source: I Made Ardika Yasa Documentation

2. Selection of Planting Media

This stage is very important to determine the success of mushroom cultivation because the selection and proper treatment of the growing media determine the quality, and intensity of mushroom growth, therefore when cultivating mushrooms it is necessary to understand in advance the right media for the cultivation of this volvariella volvacea mushroom. The planting media that is generally used for mushroom cultivation is planting media made from processed straw, sawdust, remaining sago pulp, coarse husks, or corn dogged, but whatever media is used should be sterilized first by washing it using a solution of water and lime and then the planting media is fermented for 4-8 days.

In this experiment, the author used planting media from straw material, therefore first of all, the selection of straw that is categorized as whole and dry with low moisture content has not entered the decay stage because if you use straw that is still green and wet, it takes a long time for the fermentation process as well as the straw that has rotted or crushed is also not good. After sorting and choosing straw that fits the above categories, the straw is sterilized and fermented before being used as a planting medium. After the straw changes color from brown to black or color becomes slightly darker, then it can be used as a planting medium.



Figure 3 Selected and sterilized hay
Source: I Made Ardika Yasa Documentation

3. Sterilization Process

After the straw goes through the sorting stage, the straw selected as a prospective planting medium must go through a sterilization process to support the success of the next stage of the process, namely the fermentation stage. In this sterilization stage, the selected straw must be cleaned from other objects or plants attached to the straw such as grass, plastic waste, or other pest animals after cleaning and drying so that the rice is completely dry, then the next stage the straw must be washed and soaked with a lime solution for 24 hours, after that the straw is drained and put into sacks to enter the fermentation stage.



Figure 4 Straw that has been sterilized and will enter the fermentation stage
Source: I Made Ardika Yasa Documentation

4. Fermentation Process

The fermentation stage is one of the important stages that can determine the success of mushroom cultivation where in this fermentation process the planting media has gone through a sterilization process for 24 hours, after which the straw is removed from the sack and placed on the beetle media with several layers of layers. In the first

stage, straw is stocked on a 15 cm thick beetle rack after stocking, then sprinkled a mixture of fine bran, yeast tape, and urea fertilizer is on the top of the haystack, if it has been evenly spread again, spread straw on the second stack layer 10 cm thick, and sprinkle the fermentation mixture.

Like the first stage evenly, and do up to 4 layers with each layer 10 cm thick and in the last layer, namely the 5th pile of straw only coated with 5 cm thick and sprinkled fermentation mixture on the top evenly and the last layer on semipros with water spray so that the surface of the straw looks moist. After the process of preparing the straw layer is complete, the beetle is tightly closed and left for 4 to 8 days. On the 8th day, open the cover of the beetle rack, then check whether white thread fibers have appeared on the haystack, if so, then do watering so that the humidity of the shelf is maintained and normally the fungus will grow on day 12.

E. Mushroom Breeding

1. Nursery

One of the cultivation of *Volvariella volvacea* mushrooms is through the seedling process stage, namely choosing superior and best mushroom seeds by taking prospective seeds on mushroom media that have been overgrown by *Volvariella volvacea* mushrooms on farms or making joint mushroom seeds with rice husk material, yeast tape, and urea fertilizer.

Making mushroom seeds is not difficult but requires accuracy and accuracy in determining the dose of material composition in mixing mushroom seeds, how to mix *Volvariella volvacea* mushroom seeds are as follows; (a) Prepare 5 kg of rice husks and grind them until smooth in the form of flour. (b) Prepare 2 packets of yeast tape and puree until it becomes floury. (c) 500 grams of white urea fertilizer. (d) Mix the three ingredients above/in items a, b, and c until completely mixed evenly after that if it will be a direct seeding and breeding process, the mixture can be directly sprinkled on sterilized planting media made of coarse husk, straw, or corn dogged with 3-4 layers with a thickness of 10 cm each layer then cover tightly with plastic wrap for 2-4 days for the fermentation process.

However, if you will only make seeds to be transferred to the planting media, while waiting for the sterilization and fermentation process of the planting media, then; (e) Sprinkle the mixture on coarse husk media several layers then spray with water using a sprayer and wrap tightly for the fermentation process for 2-4 days. (f) After white threads or fibers appear, it indicates that the fermentation process is going well and there are already prospective fungal seeds that will still form spores.

2. Planting

Planting *Volvariella volvacea* mushrooms is very easy, which can be sown where the sown seeds are a mixture of yeast powder tape mixed with fine bran and urea fertilizer. And you can also buy seeds on the farm and then plant them on straw media that has been stacked on mushroom racks in the beetle.



Figure 5 Planting seedlings of the fungus *Volvariella volvacea*
Source: I Made Ardika Yasa Documentation

3. Therapy

Volvariella volvacea fungus cares for treatment of *Volvariella volvacea* fungus that has grown on the growing medium only by maintaining the temperature and humidity in the beetle by using a blower and spraying regularly, and not forgetting to close the beetle tightly can be opened after the fungus is 5 days old to spray regularly and do cleaning such as pulling out foreign plants or other fungi that are different from the *Volvariella volvacea* fungus which grows on growing media so as not to interfere with or inhibit the growth and breeding of the fungus *Volvariella volvacea*.

F. Production

1. Harvest

Harvest mushroom *Volvariella volvacea*. *Volvariella volvacea* mushrooms will be ready to be harvested if the age of the mushroom is 10-12 days if for example the media used is right, the characteristics of mushrooms that are ready to be harvested will look like they have open buds, do not pull *Volvariella volvacea* mushrooms when harvesting but by turning or cutting with a sharp and clean knife so that the mushroom harvest can be sustainable because the roots in the mushroom remain safe in their original position.

2. Processing

Post-harvest processing is a decisive stage to achieve success in this mushroom cultivation business because the mushroom harvest will not be able to last for a long time if it does not go through the processing process, therefore in addition to getting training related to making media and how to cultivate mushrooms, the mud Akita generation also really needs training on how to make processed mushroom products *Volvariella volvacea* so that it can explore the potential and Improve the skills, knowledge, and insight of the younger generation of prospective entrepreneurs in the business world as a result of this mushroom cultivation.

So it is hoped that after gaining understanding and processing skills of mushroom cultivation during training, the creative younger generation will be able to process mushrooms into long-lasting derivative products such as mushroom powder, snacks, and mushroom nuggets (Sugianto & Sholihah, 2021).

3. Postharvest

Work that is no less important for an entrepreneur to do is the handling of post-harvest products because at this stage serious handling is needed as well as post-harvest mushrooms are very important to note so that the availability of harvested mushroom stock can still last longer because as we know that mushrooms, if not processed, will quickly undergo a decay process.

The right processing technique will be able to help in the process of increasing the selling value of the product, as well as the harvest of this mushroom if processed properly, mushroom farmers will not experience losses if the mushrooms have not been sold and to increase buyer interest, it is necessary to pack products. So mushrooms that have been harvested must go through the next stage, namely mushroom processing to maintain freshness, durability, and durability.

The follow-up actions that need to be done by post-harvest mushroom farmers are as follows; (a) Place or wrap mushrooms in an airtight container. (b) Store mushrooms in the freezer. (c) Avoid storing mushrooms in damp places. (d) Avoid storing mushrooms in direct sunlight. (e) Avoid putting mushrooms near foods that smell bad.

In addition to the above, it is necessary to pay attention to the design or shape of product packaging to make it more attractive and seem professional, it should include the characteristics of product excellence or production areas, given logos, labels, compositions, and doses or volume of product weight to maintain consumer trust to remain customers (Alexander Dimas Kurniawan Putra, 2015).



Figure 6 of the fungus *Volvariella volvacea*
Source: I Made Ardika Yasa Documentation

4. Marketing

The alternative marketing plan of *volvariella volvacea* mushroom production is to be marketed door to door by entrusting it to street vendors (traveling vegetable vendors), minimarkets, traditional markets, and promoted on social media accounts such as Market Palace (Bukalapak, Shoppie, Instagram, grab food).

G. Business Opportunity Estimation Analysis

1. Equipment Investment

	Price
Creation of a kumbung house	Rp. 4.382.000
mushroom rack manufacturing	Rp. 324.500
water hose	Rp. 134.500
scales	Rp. 153.000
procurement of mushroom seeds	Rp. 136.000
knife	Rp. 25.000
mushroom harvesting baskets	Rp. 30.000
timba	Rp. 43.000
mushroom home cleaning tools	Rp. 124.000
spoken	Rp. 15.500
Other ancillaries	Rp. 82.500
Investment Amount	Rp. 5.450.000

Variable Costs

Pesticides	Rp. 20.000	x	30	=	Rp. 600.000
insect glue	Rp. 12.000	x	30	=	Rp. 360.000
Other ingredients	Rp. 21.500	x	30	=	Rp. 645.000
Transportation costs	Rp. 15.000	x	30	=	Rp. 450.000
Packer	Rp. 12.500	x	30	=	Rp. 375.000
water and electricity	Rp. 28.600	x	30	=	Rp. 858.000
Total Variable Costs					Rp. 4.848.000

Total Operating Costs

Fixed costs + variable costs = Rp. 6.467.860

Revenue per harvest

13 medical history x Rp. 23.000 = Rp. 299.000
 Rp. 299.000 x 30 hr = Rp. 8.970.000

Profit per Month

Profit = Total Revenue – Total Operating Expenses

Rp. 8.970.000 – 6.467.860 = Rp. 2.502.140

Total Investment / Profit = Rp. 5.450.000 : 2.502.140 = 3 Trillion

Based on the results of the calculations above, it can be concluded that the volvariela volvacea mushroom cultivation business promises considerable profits because where the capital is IDR 5,450,000 with a profit per month of IDR 2,502,140 it can be said that entrepreneurs will be able to return capital within 2 months and 18 days.

H. Socialization of Edupreneurship Mushroom Cultivation

After carrying out volvariela volvacea mushroom cultivation experiments, to socialize this cultivation business, we carried out mushroom cultivation socialization activities which were delivered at Real Work Lectures, Counseling to the target community and Community Service activities independently and the results were made in the form of published article outputs so that the reach became wider and accessible to the general public wherever they were.

We do this to explore the potential, and creativity of the youth generation so that they have an entrepreneurial spirit with affordable capital and do not require large land but can produce a promising business opportunity and hopefully can open up jobs so that it can overcome the problem of unemployment and at least can help government programs to alleviate poverty.



Figure 7 Extension Activities

Source: I Made Ardika Yasa Documentation

CONCLUSION

Based on the explanation above related to edupreneurship in the use of agricultural waste as a medium for cultivating *Volvariella volvacea* mushrooms, the following conclusions were obtained; (a) The cultivation of *Volvariella volvacea* mushroom is not difficult to cultivate in Indonesia because the climate in Indonesia is very favorable for breeding any type of mushroom and does not require large land and large capital but requires patience, accuracy, and commitment in cultivating it. (b) If the business in the form of mushroom cultivation is developed by the younger generation, agricultural waste will be suppressed and minimized negative impacts, because the waste is recycled from waste into materials that produce food crops that contain nutrients, nutrients and high enough selling value. (c) The cultivation of this mushroom will be able to create jobs and absorb enough labor to reduce unemployment. (d) Increase the productivity of land use. (e) Merang mushrooms have economic value because if run well, it only takes 3 months to return the business investment capital.

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