



## Training Making Plastic Tempeh Hygienic (TEPIS) Post-Pandemic Era Covid 19 in Tanah Merah Residents

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**Abstract:** Purpose activity devotion this is coaching residents of Tanah Merah deep making Tempe Plastic Hygienic (EDGE) as effort Upgrade immune body and free from coronas. Partner in activity this is residents of Tanah Merah Bangkalan. activity this implemented with knowledge transfer method knowledge and technology with stages activity; 1) Planning, 2) implementation, and 3) evaluation. As for results from activity this is an effort to train and empower farmers in Tanah Merah-Bangkalan residents by increasing skills in processing food ingredients where it is hoped that Tegalwero Village farmers can master >75% the skills of making tempeh from soybeans packaged in hygienic plastic and continue the business of making tempeh from soybeans effectively independent, grow to be large so that the plan of this program will be a success. The food processing skills that are the main focus are the technique of making hygienic soybean tempeh by utilizing the potential of existing farmers' harvest of soybeans, Tanah Merah-Bangkalan residents to the fullest and making tempe products a special food of the city of salt. After a successful small-scale agro-industry program is developed, the economy of the Tanah Merah-Bangkalan people will automatically change from a traditional agricultural system to an entrepreneurial-based economy. So that the community can also become entrepreneurs, coupled with the fact that the presence of tempeh consumed by humans will reduce the number of corona viruses that attack humans.

**Keywords :** Training, Plastic Tempe Hygienic, Post Pandemic Era

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### PRELIMINARY

Invite Invite Number 12 of 1992 concerning System Cultivation Plants, farmers have freedom for determine type plant what will \_ they plant and method cultivation what will applied. Activity economy Public Tanah Merah residents are dominated farmers and laborers farmer. Sector agriculture tradition that developed in the people of Tanah Merah is one trigger low quality economy there because lack of innovation Public for develop type valuable agriculture economy high, low access for farmers against the market. In life everyday, farmer there only be silent at home while no take care land farming and busy look for income addition post -covid-19 pandemic era. Usually, land empty farm of farmers \_ plant soya bean just at the moment over harvest paddy for fill in time spare as well as as income addition. As area agriculture, farmers actually no must unemployed and confused for add income family.

Farmers can utilise land empty they with cultivate their soy \_ plant with make a innovation entrepreneurship that can fill in time spare they for add

income. When Skills in effort they increases, then they could innovate develop something type material that has price sell high on the market than just \_ be silent at home without produce income. Based on the potential of the Village real citizens of Tanah Merah could develop Becomes something producing area ingredient food with cultivation plant soya bean for ingredient raw making tempeh. Development ingredient food plant soybeans chosen as alternative program because, soy very potential very for residents of Tanah Merah and its surroundings remember soya bean not enough utilized optimally and its utilization still limited.



**Figure 1:** Sorting and cleaning seed soya bean

Besides that, can raise prospect mark sell soybeans on the market, especially again plant soya bean easy care compared type plant other. development Skills residents of Tanah Merah deep processing soya bean with techniques semi-modern conventional processing, can developed Becomes field entrepreneurship for farmers, they can utilise soya bean for made tempeh. The processing technique will developed in making tempeh this is technique processing simple as can controlled by all among. Based on background behind that, we mean for stage a accompaniment empowerment for farmer citizens of the Red Land. Which is very packaged hygienic \_ with plastic so impressed very economical and practical.

The previous farmers \_ unemployment at harvest time paddy over and usually work as laborer with low wages, especially at the time after the covid-19 pandemic. To have Skills entrepreneurship in making ingredient food among medium down specifically processing tempeh so that farmer later citizens of Tanah Merah will Becomes farmer first one can advance economy citizens of the Red Land. With development citizens of Tanah Merah become center supplier tempeh so economy Public will increase from conditions moment this. B. Expected Outcome Expected outcome from PKM Community Service is something effort training and empowerment of farmers Tanah Merah residents with Upgrade Skills processing ingredient food where it is hoped that Tanah Merah farmers can Mastering >75% skills make tempeh from soybeans and move on effort making tempeh from soya bean this in a manner independent, growing Becomes big so that plan from this program will Becomes success. Skills processing ingredient food to be focus main that is technique making tempeh hygienic from soya bean with utilise potency existing soybeans in a manner max and make product tempeh as food typical residents of Tanah Merah After the agro industry program scale small success developed so in a manner automatic economy Public Tanah Merah residents

will changed from system agriculture traditional Becomes economy based entrepreneur . So that society too Becomes entrepreneur .



**Figure 2** : Soaking and cleaning soya bean

Benefit Activity 1. Improving innovation inhabitant village in the field processing food. 2. Adding knowledge Public about technique making tempeh with technique processing semi-modern conventional. 3. Improve the income of the farmers with do Entrepreneur independent. 4. Inspiring Public for develop other innovations that have not there. 5. Improve level life family and economy Public so that Becomes access for Upgrade level life field other. 6. Spared from Corona. Moreover again tempeh is food made \_ from seed peanut fermented soybeans use mold or mushroom , for glue seed peanut soya bean the ( Alfian & Phelia , 2021; Hairun et al., 2016) . So that seed peanut soya bean condense and become a tempeh. Food this have many content good in body, and the world has confess that tempeh is healthy food (Wardani , 2008) . There are also many vegetarians in the world who use it tempeh as food replacement delicious and healthy meat That's what it becomes reason tempeh could prevent the corona virus covid-19 return again .

Reason tempeh could prevent the first corona covid-19 virus that is, inside tempeh there is strong antioxidant compared to with peanut still soybeans whole. it \_ due to the fermentation process that has been lived by tempe and make tempeh have content very antioxidant strong. Substance antioxidants inside \_ tempeh is type isoflavones that have 3 types namely daidzein, glycitein, and genistein. Antioxide alone useful for stop reaction formation radical free source diseases that damage organs. Radical free is something substance foreigners can \_ enter to in body and is cell in body same like the coronavirus covid-19. That's why tempeh good for consumed in ward off the corona virus covid-19. (Rasyid; 2017 credit: id.wikipedia.org/wiki).

It turns out inside tempeh there is sour the usual lenolenate known with omega 3 having efficacy more tall compared to with other fats ( Milinda et al., 2021; Triwibowo , 2011) . Sour linolenic acid function for protect and prevent the damage membrane cell (Liputo et al., 2019) . Function membrane cell alone that is for protect nucleus of exposure outside and things foreign. that's why consuming tempeh is good thing done. You got make tempeh as food healthy for prevent the corona virus covid-19.

Reason tempeh could preventing the next corona covid-19 virus is because inside \_ tempeh have vitamin B12 content. Usually vitamin B12 only

found in products animal course, but it turns out Tempe also has it. Vitamin B12 can function arrange serotonin metabolism, which is regulator hormone in brain and responsible answer stabilize emotion as well as bring up feeling calm and happy.

Feeling happy and happy can also boost the immune system in the body, this is what can prevent the entry of the corona virus in the body. The increase in the immune system in the body can also protect us from harmful cells and substances that will enter the body. If we have an adequate immune system, the corona covid-19 virus will also be able to fight and die so just.

Apart from vitamins A and E, which can boost the immune system in the body, tempeh also contains vitamin D which functions to strengthen the immune system in the body. This is because the active molecule found in vitamin D plays an important role in bone metabolism, muscle function and can affect the immune system, which of course is to fight several diseases. Apart from tempeh, we can also get vitamin D from sunlight, that's why at this time many are giving a positive understanding of how good it is when we sunbathe in the current situation. You can prevent the corona covid-19 virus from attacking your body by consuming tempeh and sunbathing at 10 in the morning to get more nutrition and health.



**Figure 3:** Production tempeh

Look after cow or goat. In activity economy, the Tanah Merah area is not far different with rural others. Where part big its inhabitants work as farmer good farmer owner land or as laborer farm, however there is part small work as traders and even overseas. on society class medium below included \_ inhabitant village Tanah Merah area where the farmers only be silent at home because confused look for profession for add income family.

## IMPLEMENTATION METHOD

PKM activities implemented in Tanah Merah Residents with total member partners involved 15 farmers. Method implementation dedication is counseling and practice make tempeh with stages work as following:

1. Preparation tools and materials to be used in activity devotion. In the process of setting up tools and materials PKM team works same with Partners. Prepared tools \_ among others; a) Boiler, b) Strainer, c) Basin , d) Fan , e) Stove , f) Incubator mushroom , j) Winch / tray , k) Sotel wood. And ingredients form; a) Seeds soybeans, b) Water c) Plastic, Banana leaves and paper d) Yeast tempeh .



2. supplies material through activity counseling.  
Before done practice or demonstration activity making previously done counseling about importance food nutritious , food functional , existence source power nature and use source power nature .
3. Training making Hygienic plastic tempeh.  
Training making tempeh with use ingredient base soybeans and packaging using plastic. Claim process with hygiene plastic tempeh technique
4. Monitoring and evaluating results training  
Monitoring and evaluation done for knowing to what extent level understanding and skills partners after done training  
As for steps manufacture is as following; 1. Clean especially formerly the tools will used like tray, boiler etc to be sterile 2. Wash soya bean until clean 3. Soybeans are already cleaned soaked approx. 24 hours 4. If seed soya bean already soften, peel skin she said with wring it out and rinse it together with use clean water. 5. Soybeans boiled arrived twice \_ soft 6. Seeds that have been boiled drained on winnowing/tray, next Use fan wind for aerate soya bean earlier until in circumstances warm 7. Sprinkle yeast tempeh little by little on his appearance until evenly. 8. Prepare wrapping, okay use leaf layered paper or plastic clear so more hygienic and practical, 9. Wrap ready soybeans given yeast, no until there is gap and set the thickness is 10. Jajar finished tempeh wrapped for do fermentation During two day to get maximum results.

## DISCUSSION RESULT

Searah general activity devotion done with good in accordance with the program that has been organized and planned. As for success each stages are described as following:

Preparation Implementation a. Stage Mapping Location Stage Community Service mapping this is something stages initial done \_ before PKM- Devotion team Public designing program planning to be implemented (are proposal writing). In Step this will identified what problems faced by society target and solve solution, based on lasting potential \_ this not yet developed by the community. In Step this while also asking letter work same with partners work, if this program stated accepted. b. Stage procurement equipment in accordance with planning that in activity this, will bought a number supporting equipment activity making tempeh ready soybeans \_ listed in the description tools and materials above .

Stage socialize Stage socialization this done at home tutor resident of Tanah Merah as device Villag , with substance material importance develop Entrepreneur independent through supplies skills in process donkey Becomes tempeh soybeans , prospects in the future as well as steps the marketing . In Step socialization this will explained superiority making tempeh soya bean for Upgrade economy family.

Implementation Activities a. Stage Making tempeh soy After all equipment available, then it's time implementation from all acquired knowledge in Step socialization, that is making tempeh from soya bean with the previous technique has socialized. In Step this will accompanied by a competent person in field processing ingredient food as well as team PKM executor.



**Figure 5:** Tempeh is ready marketed

Product Marketing After 3-4 weeks after the training, the PKM Community Service team together with the community will market the products in the form of soybean tempeh by establishing relationships with various food distributors in markets. 4. Monitoring and Evaluation This stage is a stage of developing the tempe making training, the monitoring phase is carried out by monitoring and assisting during the training process. How is the progress of the program that has been implemented and evaluate the various obstacles that arise during the activity and find solutions with the community. Every two weeks the farmers will be invited to discuss the progress and achievements of the tempe-making training activities in independent entrepreneurship to develop the potential of Tanah Merah-Bangkalan village.

## CONCLUSION

PKM Dedication to Public this initiated for give solution on problem economy community in the Tanah Merah area with assistance. Empowerment of farmers Tanah Merah area for Upgrade Skills in the field Entrepreneur specifically processing soya bean with technique processing soy. Processing technique soya bean Becomes innovation ingredient modern food order more effective and has productivity results high sales. Accompaniment empowerment of farmers deep red soil area development Skills process ingredient new food and entrepreneurship \_ independent based agro industry scale small this, besides will Upgrade economy family. They permanent can do processing making tempeh soya bean at home they when course, after Duty domestic they resolved, packed in wrap plastic in a manner economical and hygienic .

## RECOMMENDATION

In facet economy village This is supported by a traditional market. facet education Village this is one printer generation educated in the Tanah Merah area and its surroundings, p this seen from many various level more education \_ year the more develop even there is a number of cottage boarding school is in the village the. The Tanah Merah area is a based area agriculture. Majority land agriculture in the area the planted paddy or palawijo, meanwhile for as activity part time , people farmer .

## THANK-YOU NOTE

Saying *teri m* thanks spoken for all *pa m ong* village along inhabitant as well as farmers residents of Tanah Tanah Merah and its surroundings are like that enthusiastic in *m* training this. Besides that saying thank you is also said for all participant devotion along *m* team that is so solid in *m*

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