

Salt Therapy for Health as an Alternative Additional Activities on The Tunnel Model in The Buffer Group, Pliwetan Village, Palang District, Tuban Regency

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Abstract

Pliwetan Village, Palang District, Tuban Regency is an area with the potential to produce salt and the highest production compared to the surrounding environment. This is because, in this area, there are salt ponds that use the tunnel method owned by partners or groups of buffer salt farmers—the use of tunnel salt land as a tool for health therapy. This Community Service activity was carried out in the buffer salt farmer group of Pliwetan Village, Palang District, Tuban Regency with a duration of time being carried out in March 2022. The parties involved in this activity are: Fisheries and Marine Science lecturers, PGRI Ronggolawe University and partner groups of the Buffer Salt Farmers Group who play an active role as participants in every activity carried out in community service activities. The realization of the results of this activity is to provide counseling and assistance on how to use the salt tunnel land for health therapy, review of the results of achievements in the form of assistance in the practice of salt therapies for health so that it is hoped that the public understands the benefits of salt therapy for people health.

Keywords: salt therapy, health, tunnel model, additional activities, community empowerment

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Introduction

In Indonesia, the most widely produced salt has a NaCl content of 80.12% and people call it People's Salt. This salt is processed to produce 99.98% NaCl content with very small impurities. Industrial salt has an important role in industries, such as the manufacture of caustic soda, soda ash, preservation, pharmaceuticals, and textiles. Hardianti, M. F. et al (2015).

For people's lives, salt is the most important commodity because it is a daily necessity. Illiyyun, N. N. M. et al (2021). There are several industries that require salt for preservation purposes and chemical mixtures and other than salt needs for consumption. Because to meet the national salt

demand and the large number of salt needs, the state must make/produce salt to fulfill it. Supported by natural wealth which is the main capital for salt production, the imbalance between domestic salt demand and domestic salt production has encouraged the government to import salt. Tinaprilla, N. et al (2017).

Domestically, for industrial salt, each year the need for salt is a total of 1.4 million tons and for salt used for consumption a total of 1.6 million tons, so there are 3 million tons for industrial salt. Setiawan, A. H. (2013). In 2013 the number of People's Salt production was 1,319,607 tons. There is a need for national consumption salt of 1,242,170 tons, of which this amount is sufficient. One solution for the



short term is by importing to fulfill it in terms of production, because Indonesia has not been able and has not been able to meet national needs. Azizi, A. et al (2013).

The inability of the People's Salt to meet the demand for national salt has become one of the indicators of the problem. Of the total amount produced for People's Salt in terms of quality and quantity, it is still far below the average national need, which is only able to provide about 30-35% of the total national demand. This argument is always expressed on this reality, and even then it is still limited to the need for consumption salt. After that the government made a policy in order to increase the production of the amount of salt and the distribution of salt. The government's efforts to make salt an export commodity were then adopted by him with a salt monopoly policy by implementing the salt monopoly ordinance (Zoutmonopolie-Ordonnantie) during the Dutch colonial period. When Indonesia became independent, the policy was still in effect and was only abolished through Law no. 13/1959, and subsequently there has never been a policy to protect the People's salt business. With this, there is a tendency to shift policy from monopoly to liberalization, which is marked by the diminishing role of government and private domination. Rochwulaningsih, Y. (2012).

According to Yety Rochwulaningsih, Y. (2012) To meet the supplier's need for national salt is not only caused by supply and demand, because from this problem there is the inability of People's Salt to be fulfilled but also because of its quality. Therefore, Presidential Decree No. 69 of 1994 which regulates the procurement of iodized salt. Murtono, D. (2009). This Presidential Decree states that in order to improve the quality of human resources, it is necessary to make efforts to prevent and overcome various disturbances to human health resulting from iodine deficiency through salt iodization activities. Article 1 Presidential Decree No. 69 of 1994 states:

Iodized salt that meets the Indonesian Industrial Standard (SII)/Indonesian National Standard (SNI) is salt that can be traded for the purposes of human or livestock consumption, fish salting, or food industry auxiliary materials. Kelik

Wardiono, S. H. et al (2017).

The cause of iodine deficiency (IDA) is due to low consumption of iodized salt. It is hoped that the community will be able to consume foods that contain high iodine or consume iodized salt in order to meet the quality requirements to overcome these problems. Use and storage, the wrong selection of iodized salt can reduce the effectiveness of the use of iodized salt. Hartini, D. (2017).

In all communities in Indonesia, there is an iodine deficiency which is still a nutritional and health problem, so that the total goiter rate (TGR) is more than the maximum limit set by the WHO of 5%. Pratiwi, S. B. et al (2021).

Methods

Community Empowerment

The methods used for this service are: community empowerment through the introduction of salt therapy for health as an alternative to additional activities in the tunnel model in the Pliwetan village group, Palang sub-district, Tuban district as partners. This community empowerment begins directly in order to provide knowledge about the importance of using salt for health that can be recognized directly to partners, therefore it is hoped that this activity will be accepted by participants (partners). The implementation of this activity includes 3 stages, which are carried out from April to June 2022. The preparation for this community service activity is carried out from the initial stage which includes identification of partner problems including licensing management activities that are related to the activities carried out.

This 2nd stage implementation activity is a continuation of the community service implementation activities that have been carried out by delivering counseling on how to introduce salt therapy for health as an alternative to additional activities on the tunnel model in the Pliwetan village display group, Palang sub-district, Tuban district. After being delivered, after that all the implementing teams gave the opportunity to all participants or residents who followed them (partners) to follow the practice in salt-added land by doing salt therapy for health which was carried out by a tunnel model salt pond farmer partner group. In the implementation of this activity, the



team is always accompanied by partners starting from practical activities in the field carrying out salt therapy for health. After the activity was carried out by all teams by giving questionnaires to all participants to be filled in for feedback for further activities.

Monitoring and mentoring activities are always carried out by the team in the final stages of the activity. So that mentoring activities for the introduction of salt therapy for health as an alternative and also additional activities on the use of tunnel model land in the Pliwetan village display group, Palang sub-district, Tuban district, should be carried out continuously.

Results and Discussions

In this activity about the introduction of salt therapy for health as an alternative to additional activities on the tunnel model in the Buffer Group, Pliwetan Village, Palang District, Tuban Regency. Partners are given counseling about the benefits of salt therapy through the delivery of materials and procedures for salt therapy, which are as follows:

a) Maximum capacity for 10 people, b) Take off your footwear-Wash your feet, c) Warm conditions up to 30 minutes/session, d) Hot conditions maximum 15 minutes/session, e) Standing/walking is not allowed to sit, f) Electronic/HP/Cellular equipment is not allowed to be brought

Service activities in the form of community empowerment through the introduction of salt therapy for health as an alternative to additional activities on the tunnel model in the Pliwetan village display group which is located in the tunnel pond. Partners of the salt farmer gift group who participated in this activity consisted of residents who had a tunnel model salt farm and the general public with a total of 30 participants as partners who helped in this service activity.

Meanwhile, there are several problems that have been found by all implementing teams from the results of observations with partners from this activity starting from the identification of partner problems. Initially there was a problem with the introduction of salt, it was found that there were many partners who did not know the benefits of salt therapy for health. Processing the questionnaire data after being filled out by all

partners/participants, it was found that 100% of the participants still did not recognize the benefits of salt in general, including for health. Of all partners admit that 46% of partners do not know the benefits of salt. while the remaining 54% stated that they knew the use of salt for health.

Partners who know the use of the tunnel model salt land use with frequency sometimes state that if the use of the land can be used for salt therapy for health.

Relating with the problem of introducing salt therapy for health, the team provided counseling about the introduction of salt therapy for health as an alternative to additional activities in the tunnel model in the Pliwetan village group, Palang sub-district, Tuban district so that pond farmers can take advantage of their land.

The implementation team before delivering the counseling, had distributed the material beforehand with the aim of knowing the intent and purpose of the activity being conveyed so that it could be understood, followed by both partners. The presentation of the material was first carried out by all the teams, namely: knowledge, introduction of salt in general and its benefits.

Submission of material on the introduction of salt therapy for health as an alternative to additional activities in the tunnel model salt field. Based on the questionnaire data (questionnaire results) provided, 46% of participants said that they did not know the benefits of salt therapy and (54%) of participants also stated that they sometimes knew about the use of salt therapy for health.

In addition to the material on the introduction of salt therapy for health, material on the procedures for salt therapy for the buffer salt farmer group as community partners was also conveyed by the activity implementation team. Many people still think that salt can no longer be used as a therapy for health. Likewise, the opinions of partners/participants of community empowerment through this service, 49% consider that salt can only be used as an additional dish, so it cannot increase the selling price, 43.5% consider sometimes the use of salt for health therapy and safe for the community, and only 7.5% are aware that salt therapy is for health. Knowledge of the benefits of salt is still widely understood, for example, there



are still 7.5% of partners/participants who state the use of salt therapy for health. The participant's introduction of salt therapy for health was the use of a tunnel model of salt land. This is not understood by the public when viewed from a health perspective and as an additional alternative to the tray salt group.

The next activity discusses the material that also needs to be conveyed by the implementing team, namely providing knowledge to participants about the benefits of salt in the salt therapy procedure used. However, the salt tunnel model can be used for therapy. For example, the tunnel model salt fields owned by other farmers are many and have not been used.

It is very important to convey material related to the benefits of salt in general and the procedures for salt therapy for health during activities to provide knowledge to partners, because an understanding of the benefits/functions of salt is needed by activity participants so that they can take advantage of their salt pond land. Besides that, it is also to introduce directly to the wider community so that the benefits of salt therapy for human health can be known (Figure 1 and 2)



Figure 1. Salt Therapy in Tunnel Salting Model



Figure 2. Providing materials related to the benefits of salt in general and the procedures for salt therapy for health

It is known that 100% of the questionnaire data processing that has been received and filled out by all participants, have never known the benefits of salt for health therapy which are commonly found in the general public and the surrounding environment. Analysis of the calculation of the questionnaire data showed that 54% of participants had not been able to use their salt ponds as an alternative for salt therapy, 29.7% of participants occasionally used their salt ponds for health therapy, and 16.3% of participants had used their salt ponds for health therapy. However, this use is only limited to trying.

After the material on the use of salt for health as an additional alternative for the traditional salt farmer group, the implementation team also delivered material on the procedures for salt therapy. Based on the calculation of the data that has been generated through a questionnaire after being distributed to partners/participants, 54% have stated that they have heard of the use of salt for health. However, it has not been matched with knowledge of using tunnel salt land as an alternative for health salt therapy.

The next activity after the presentation of the material is the practice of salt therapy procedures for health for the group of salt farmers for the community based on the functions and benefits of salt. The number of participants as many as 30 people were divided into 2 groups. With the details of group one 15 participants practiced in the salt field adjacent to the buffer group, then in turn followed by the second group 15 participants also practiced it.

The practice of salt therapy for health in the tunnel model salt field, which was attended by a group of salt farmers (salt farmers) in Pliwetan Village, Palang District, Tuban Regency, which had been carried out with the team, showed that the participants seemed enthusiastic about participating in the activity from the beginning to the end. After the activity was carried out starting in the morning until it was finished, it was continued by all the implementing teams by distributing questionnaires to all partners/participants who had followed it to be able to fill in as data material to be processed. Data sheet questionnaire with a total of 30 which has been divided, all participants have filled it out. Then

the data is processed by obtaining results that 100% (30 participants) provide a statement that the activities that have been carried out are useful.

The introduction of salt therapy for health as an alternative to additional activities in the tunnel model in the visualization group of Pliwetan Village, Palang District, Tuban Regency.

Community empowerment activities through outreach to the community, the use of tunnel salt land as an alternative additional activity to increase land use is the first step to introduce salt farmers to the salt farmer group and to the community in Tuban Regency.

Therefore, by empowering the community through this activity, it will generate knowledge as well as promote the use of salt for health for the entire community. This activity is very beneficial for the environment and all partner communities (salt farmers) who follow it, can also use their pond land as a source of income or economic improvement for surrounding partners

Conclusion

After the implementation of this service activity, it can be concluded that the partners of the salt farmer gifting group in Pliwetan village think that this activity is very good and useful for the surrounding community and after participating from the beginning to the end of this activity, the participating partners/participants gain knowledge of the differences between the benefits of salt for health and the procedures for salt therapy for the salt farmers in particular and society in general. So that it can be followed up to increase income as well as alternative additional activities.

References

Adiraga, Y., & Setiawan, A. H. (2013). Analisis dampak perubahan curah hujan, luas tambak garam, dan jumlah petani garam terhadap produksi usaha garam rakyat di Kecamatan Juwana Kabupaten Pati (Periode 2003-2012) (Doctoral dissertation, Fakultas Ekonomika dan Bisnis).

Ariyani, D. W., & Hardianti, M. F. (2015). Pabrik pemurnian garam dari garam rakyat menjadi garam industri dengan metode vacuum pan

(Doctoral dissertation, Institut Teknologi Sepuluh Nopember).

Hartini, D. (2017). Kualitas Dan Cara Pengelolaan Garam Yodium Keluarga Di Wilayah Kerja Puskesmas Toroh 1 Kabupaten Grobogan (Doctoral dissertation, Universitas Muhammadiyah Semarang).

Jamil, A. S., & Tinaprilla, N. (2017). Faktor-Faktor yang Memengaruhi Permintaan dan Efektivitas Kebijakan Impor Garam Indonesia. *Buletin Ilmiah Litbang Perdagangan*, 11(1), 43-68.

Kurniawan, T., & Azizi, A. (2013). Dampak Kebijakan Impor Dan Kelembagaan Terhadap Kinerja Industri Garam Nasional. *Jurnal Kebijakan Sosial Ekonomi Kelautan dan Perikanan*, 3(1), 1-13.

Murtono, D. (2009). Hubungan Pengetahuan Dan Sikap Ibu Rumah Tangga Dengan Pengelolaan Garam Di Desa Jono Kecamatan Tawangharjo Kabupaten Grobogan (Doctoral Dissertation, Universitas Muhammadiyah Surakarta).

Mutalazimah, M., Isnaeni, F. N., Mardiyati, N. L., Pujiani, K. N., & Pratiwi, S. B. (2021). Edukasi Pencegahan Gangguan Akibat Kekurangan Yodium (GAKY) Berbasis Media Pembelajaran Flipchart. *Warta LPM*, 24(4), 752-762.

Nugroho, M. S. E., Purwanto, P., & Suherman, S. (2016). Pengelolaan Lingkungan Pada IKM Garam Konsumsi Beryodium Di Kabupaten Rembang. *Jurnal Ilmu Lingkungan Undip*, 14(2), 88-95.

Rochwulaningsih, Y. (2012). Pendekatan Sosiologi Sejarah Pada Komoditas Garam Rakyat: Dari Ekspor Menjadi Impor. *Paramita: Historical Studies Journal*, 22(1).

Sofian, A., Yanti, N., & Illiyun, N. N. M. (2021). *Dinamika Kehidupan Ekonomi Petani*



Garam Di Desa Dresi Kulon. *Jurnal Ilmu Sosial dan Humaniora*, 10(3), 351-367.

Sulastiono, H., & Kelik Wardiono, S. H. (2017). *Tinjauan Yuridis Tentang Distribusi Garam di Daerah Jono (Studi Kasus di Desa Jono Kecamatan Tawangharjo Kabupaten Grobogan)* (Doctoral dissertation, Universitas Muhammadiyah Surakarta).

Yety Rochwulaningsih, Y. (2012). *Membongkar Persoalan Struktural Tata Niaga Garam Rakyat*. In Workshop “Strategi Pengembangan Usaha Garam Rakyat Berbasis Nilai Sosiokultural untuk Mewujudkan Swasembada Garam Nasional” Hotel Ibis Semarang, 15 Oktober 2012.