

The Protection and Preservation of Indigenous Knowledge on Tempe, Traditional Native Food of Indonesia

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Abstract: Tempe is a traditional native food of Indonesia, its patents filed by foreigners in the United States and Japan. This is harmful for Indonesia because in the future we are threatened to pay loyalty to patent holder when we produce according to the registered patents, especially when we export tempe to those countries. The purpose of this study is to gain understanding of how to protect and preserve knowledge of tempe for the welfare of people of Indonesia. Using a qualitative approach, the research is conducted through literature review concerning the preservation and protection of traditional knowledge of tempe. From the research it was identified that the government and people of Indonesia have raised objection about patented tempe by foreigners but they are still not effective to protect the intellectual property rights of our nation because they are not well organized. Now is the time for Indonesia government to take initiative to preserve and protect the intellectual property rights of tempe as one of Indonesian traditional knowledge.

Key words: Tempe, indigenous knowledge, intellectual, government, rights

INTRODUCTION

Indigenous Knowledge (IK) is unique tacit knowledge to a specific culture and society. It is embedded in community practice, institutions, relationships and rituals as a basis for local decision-making in agriculture, health, natural resource management and other activities (Agrifoglio and Metallo, 2015). Communities may want to preserve their knowledge but it is different from protect it from misuse by other. Some communities realize the economic benefits they can gain from their IK and they do not want this economic benefit stripped from them (Njiraine *et al.*, 2010).

Tempe is genuine traditional food of Indonesia, this IK should be preserved and protected as Indonesia Intellectual Property Rights (IPR). Tempe is found in Serat Centhini manuscript at 16th century. The word "tempe" is suspected from ancient Java language. In ancient Java society, there is a white color food made of sago flour called tumpi. Tumpi is looked alike fresh tempe which has white color as well. It might be the root of the word "tempe". But it happens that United States and Japan has done research on tempe and registered the patent in their country.

This will bring harm to the nation and the people of Indonesia. In 2012, Indonesia has about 81,000 tempe producers who produce 2.4 million ton tempe annually.

Tempe industry create IDR 37 trillion (about USD 3 billion) value added to the country, this was significant contribute to Indonesia. We imported 1.6 million ton soybeans from United States annually and 80% of them are to produce tempe and tofrom. The purpose of this research is to know how to protect and preserve tempe IK as IPR of nation and the people of Indonesia. We hope to benefit from tempe as it is our IK and not restricted by foreign nations who have registered tempe as their patent and detriment Indonesian.

Literature review

IK practices: To help reduce poverty, world bank and its development partners promote exchange of IK and integrate it into its assistance program. IK exchange within and across communities can increase cross-cultural understanding and enhance the development of cultural dimension. The 6 steps to process IK exchange within developing countries and between developing countries and industrial countries are: recognition and identification, validation, recording and documentation, storage, transfer, dissemination. Ideal outcome of IK exchange is successful transfer and dissemination. It is the learning process whereby the community where an IK practice originates, transmits the practice by the agent and the community who adopts and adapts the practice all learn during the process.

Challenges on preserving, protecting and nurturing this knowledge face by communities are:

- They do not know what traditional knowledge they possess
- They do not know how to identify and protect the knowledge
- Limited national and international laws to help them preserve and protect their knowledge to reflects their traditions and customs

Current issues in the management of IK in Indonesia:

Local communities cultural asset in Indonesia are claimed by the foreigners as individual or corporate or state and they are quite a lot. Among them are batik, ancient manuscripts, materials culinary (cooking), song, dance, musical instruments, designs and plant products and it has been quite some time ago. States and parties that claim the assets of Indonesian culture are Malaysia, Dutch, English, French, Japanese, American and others. In addition to the state or foreign governments, claimants of Indonesia culture are also some world-class companies. Especially for patent tempe (tempeh) there are already two patents registered in the Republic of Indonesia, 15 patents in the United States and 5 patents in Japan.

Protection and preservation of IK in Indonesia: Now Indonesia has the legislation in the field of intellectual property rights are adequate and do not conflict with the provisions as required under the TRIPS Agreement. Legislation referred to include:

- Act No. 29 of 2000 on Plant Variety Protection
- Act No. 30 of 2000 on Trade Secrets
- Act No. 31 of 2000 on Industrial Designs
- Act No. 32 Year 2000 on the Layout Designs of Integrated Circuits
- Act No. 14 of 2001 on Patents
- Act No. 15 of 2001 on Brand
- Act No. 19 of 2002 on Copyright

In line with the changes in various laws mentioned above, Indonesia has also ratified 5 international conventions in the field of intellectual property rights as follows:

- Paris convention for the protection of industrial property and the convention on the establishment of the world intellectual property organization (Presidential decree No. 15 of 1997 on the amendment of Presidential decree No. 24 of 1979)
- Patent Cooperation Treaty (PCT) and the regulations under the PCT (Presidential decree No. 16 year 1997)

- Trademark law treaty (President Decree No. 17 of 1997)
- Berne convention for the protection of literary and artistic works (Presidential decree No. 18 of 1997)
- WIPO (Presidential Decree No. 19 1997)

Ethical issues IK in Indonesia: Is Indonesian government realized the implications that come with the Indonesian involvement in this IPR regime? Is it actually beneficial to the people of Indonesia to follow the “intellectual property rights regime”? Are we ready to fight within the framework of existing international trade?

While difficult to show how much people enjoy technology transfer that supposedly accompanies foreign investment, the weaknesses and shortcomings of the rules has begun to appear. With strong capital and advanced research technology, developed countries could snap the specific habitat of animals or plants through patents.

Challenges in preserving IK in Indonesia: Indonesian cultural assets claims by the parties or the state (government) foreigners are increasing in numbers in recent years. As revealed by the mass media and electronic media, claims are not only done by the foreign businessmen but also by several foreign countries. The existence of such claim, of course, led to “disappointment” for some groups of citizens and the nation of Indonesia. Besides, it also raises the question of how exactly the government’s role in efforts to protect the assets of the community culture. How does the government respond to the claims by third foreign country on the culture of the people of Indonesia?

Development and protection of the cultural richness of Indonesia is in fact the responsibility of all citizens and the nation of Indonesia. Only the roles and responsibilities of the various components of the community level is not the same. There is liability arising from community stakeholders (source) of an asset of traditional culture, there is the responsibility of activists and actors expression of cultural assets, also have the role and responsibility of government. The role of protection and response of the Indonesian government is the main subject.

MATERIALS AND METHODS

This is a preliminary research using qualitative approach, based on literature study. In this research empirical method is used with conceptual and analytical approach as well as the writing style deductive perspective and information made through library research.

RESULTS AND DISCUSSION

Protection and preservation of tempe: Actually, the patents implementation on traditional knowledge is irrelevant therefore parties who wish to obtain patent protection must perform certain steps that require specific skills and abilities as well. The move started on the research to produce an invention, the preparation of such new claims of patent documents and patent specifications, filing for protection to the patent office and so on until the right is granted. IPR regimes and also emphasizes the rights of the individual rather than communal rights which as has been known in traditional knowledge.

In fact can be drawn one conclusion of contract law by following existing rules and principles of international trade contracts enforceable contract law as an alternative model of benefit-sharing by the government through the directorate general of IPR. It is also seen from what has been mandated in the CBD and WIPO in provision WIPO/GRTKF/IC/2/3, 10 September 2001 (Pimantoro, 2016)

Protection of traditional knowledge, particularly with regard to traditional cultural expressions should also be a concern. This is important as a safeguard of knowledge and folklore may be one of the drivers of increased local revenues. Referring to Article 10 of Law No. 19 of 2002 on Copyrights, the local government can be a carrier of the rights of local traditional cultural heritage.

Besides by means of legislation, through documentation is also an important effort in protecting the form of traditional knowledge. There are two things you can do to provide legal protection of traditional knowledge: For short-term protection with an inventory system or documentation of traditional knowledge, this does not only provide informative function but can also be used as legal proof function. Documentation can be done by way of photographs, writings or special notes made by the government, For the medium and long term by issuing regulations that specifically protect traditional knowledge. One way to achieve the national interest at the international level is by creating national legislation that regulates also the issues of an international nature.

National Standardization Agency (BSN) has published a standard tempe, namely: SNI 3144: 2009 soybean tempe (BSN, 2012). This standard is a revision of SNI 01-3144-1998, Tempe soybeans. SNI 3144: 2009 formulated by the Technical Committee 67-04 Food and beverages. This standard has been discussed by the technical meeting and agreed in a consensus meeting on 27 November 2008 in Jakarta. Draft act on protection and

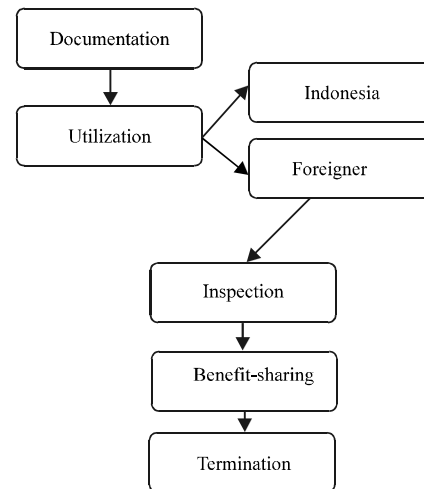


Fig. 1: Benefit-sharing contract process

utilization of intellectual property traditional knowledge and traditional cultural expressions, benefit-sharing contract process (Fig. 1).

Tempe IK protection through the IPR will take a long time. For that we need to take alternative steps to improve the benefits of IK tempe that we have by promoting tempe. The purpose of this promotion is to let the world recognizes tempe original food belongs to Indonesia. Amanda provides several steps that must be taken by Indonesia in order to make Indonesian foods, including tempe to be the host in our owned country and famous abroad, they are (Messakh, 2015):

- Discover variety of traditional Indonesian food through the region or type of food raw materials that can be done by observers, researchers and government
- Increased regional and central government intervention through policy and promotion involving the leaders, serving traditional meals in a meeting of government and a state banquet
- Moving the role of business both in terms of trying to provide venture capital and traditional food, partnerships and sponsors events/fairs/festivals or education about traditional Indonesian food in schools and communities
- Actively follow global events that can be associated with traditional food. Thus, it can be obtained the benefits of social media coverage as well as internationally
- Intensified the efforts of individuals and communities in various regions in Indonesia in awareness raising and public events related innovative traditional food

- Participate in international organizations membership, to promote traditional Indonesian food
- Initiating and participate in the survey related to traditional foods in order to determine the public perception and develop programs accordingly

Ethical issues of tempe: Neoliberal economic program and the interests of US industrialists is the main driver of the implementation of the rules on intellectual property rights. Indonesia as a developing country does not have a bargaining position due trails only on what is decided from the outside, with occasionally giving lipstick that seemed to reap the benefits in it.

Not to mention the pathetic condition of tempe makers who will be chased by law enforcement of intellectual property rights for “stealing” intellectual property purchased by transnational companies. In a worse situation as it is now, the regime of intellectual property rights will only make Indonesia more left behind.

Challenges in preserving tempe: IK preservation of tempe in Indonesia is not considered an important factor and added value to produce and sell tempe in the country. Although, tempe overseas markets are now growing very fast and large, whether individuals or individual entrepreneurs have difficulty to protect and preserve tempe IK by obtaining patents both domestically and abroad to protect its IK for export purposes. The government does not have protection mechanism other than a patent IK on tempe, alternative benefit-sharing IK on tempe is not easy to set up in the country and implementation abroad.

CONCLUSION

IK protection on tempe already started to be pursued but still not effective because it cannot be done by individuals or companies or NGOs alone. Preservation of IK on tempe is good because people love the food and highly nutritious and provide economic value which has improved the welfare of society. Companies and individuals from foreign countries has registered tempe patent in their country because they are interested in the economic potential but the IK on tempe is belong to Indonesian, is highly unethical for foreigner to patent tempe without involving the nation and the people of Indonesia.

Indonesia government should take initiative pro-actively to protect IK tempe we have not do it yet because we did not put it as high priority and it will require great effort. We have to put effort to make legislation in the country and have to face pressure from abroad that are superior and dominate international trade organizations such as WTO and intellectual property right protection organizations such as WIPO.

To patent wide range of IK on tempe belong to Indonesia, government can empower research and education institutions and local communities and government to conduct scientific studies to preserve the various variants of tempe. This will gain international recognition that tempe is an original food and belongs to Indonesia. Provide protection on IK ownership on tempe, in this case the people of Indonesia in general and the people who preserve IK on tempe in particular will improve their welfare. Without IK protection on tempe for the people of Indonesia, preservation and dissemination of IK on tempe bring more disadvantages than advantages for the nation of Indonesia.

ACKNOWLEDGEMENTS

This research is supported by Faculty of Humanities, Universitas Indonesia and the Directorate of Research and Community Service, Universitas Indonesia.

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