REPORT ACTIVITY

The Indonesian Tempe Forum
FY 2011

Supported by:
American Soybean Association
International Marketing (ASAIM)
Executive Summary

During 2011, the Indonesian Tempe Forum (ITF) conducted several activities in training, promotion, education program and advocacy. ITF has been acknowledged as one of the important stakeholder in the development of tempe production in Indonesia. The Good Hygienic Practices Module developed by ITF has been used regularly for training on the application of Good Hygienic Practices in the production of tempe several important areas of tempe production in Indonesia, such as Semarang, Pekalongan, Surabaya and Jakarta. Training activities and development of tempe pilot plant has been adopted as a regular activities funded by Local Government.

One of tempe pilot plant in Jakarta was visited by Under Secretary USDA, Mr. Michael Scuse. The Under Secretary witnessed himself the production process of tempe with main raw material US soybean. He expressed his proudness that US Soybean contribute significantly to the Indonesian small medium enterprise through tempe production in Indonesia.

ITF also actively involved in the development of tempe standard with other National Bodies including Ministry of Industry, Ministry of Health, National Agency for Food and Drug Control and National Standardization Agency. Some educational activities were also organized such as seminar and interactive talk-show on radio to promote the health benefit of tempe.

Two seminars at National level was successfully conducted in collaboration with Indonesian Medical Nutrition Association, Soyjoy and Satya Wacana University Salatiga. To promote the culinary aspect of tempe, various activities were implemented, including training on diversification of the product, cooking demo and cooking competition. Interactive talk-show in the radio is one of the good promotion activities to promote tempe consumption that can reach the general audience. Continued support and collaboration between stakeholders are needed for a better condition of tempe production in Indonesia.

ACTIVITIES

1. Organization consolidation

1.1 Regular meeting

The activities of Indonesian Tempe Forum scattered in several areas, each area was coordinated by focal point at Universities as follow:

1. Jakarta and Bogor: Prof Rizal Syarief and Prof. Made Astawan, Bogor Agriculture University.
2. Central Java: Dr. Harnina Bintari, Semarang State University and Ir. Luciana Dewi, Satya Wacana University Salatiga
3. Yogyakarta: Prof. Mary Astuti, Gadjah Mada University
4. East Java: Ir. Joek Hendrasari Arisasmitha, Widya Mandala University Surabaya

Several regular meeting was organized in each area. It was equal to monthly regular meeting attended by 3-5 local committee members to maintain communication and...
share information as well as to consolidate programs. During meeting all ongoing activities was discussed and evaluated. It is proposed to collaborate with some more Universities, especially outside Java Island to expand ITF activities.

1.2 National Quarterly Meeting

This meeting was organized in a National wide as a forum for sharing information, sharing experiences, and to discuss current issues related to tempe, in the manner of scientific, economical, as well as social aspects.

This meeting was conducted at the same occasion with National Tempe Seminar in Salatiga on September 20, 2011. The afternoon session of the seminar was dedicated for Indonesian Tempe Forum Quarterly Meeting. The meeting was attended by 26 participants, including representatives from several institutions in Salatiga and Central Java. The meeting session was opened by opening remark by Prof. Rizal Syarief on behalf of the Indonesian Tempe Forum. He explained the objectives of the meeting gave a brief explanation about the Indonesian Tempe Forum and facilitated the introduction of participants. Dady Maskar presented the FTI activities in the past year and facilitated the discussion on the program planning for year 2012.

2. Seminar / Symposium

As previously organized annually by ITF, during 2011, ITF has successfully conducted two National level Seminar in Jakarta and Salatiga.

2.1 The 4th Soy Seminar: The Advantages of Soyfood Consumption on Health

The seminar was held in Jakarta on 23 July 2011 and organized in collaboration with Indonesian medical Nutrition Association and sponsored by Soyjoy. The theme of seminar was the Advantages of Soyfood consumption on Health. It was 220 participants mostly medical doctor and nutritionist from various institutions attended the seminar.

The seminar session was opened by opening remark from the Committee Chairman Dr. R. Priyambodo, continued with remark by Prof. Rizal Syarief on behalf of the Indonesian Tempe Forum and he officially opened the Seminar on 9.00 AM.
The seminar was divided into 2 sessions. The first session which was moderated by Dady Maskar consisted of two speakers; Prof. Yukio Yamori, M.D. Ph.D. Director, Mukogawa Women’s University Institute for World Health Development, Japan and Dr. Susianto, Regional Coordinator for International Vegetarian Union (IVU) Asia Pacific and President of Vegan Society of Indonesia (VSI). Prof. Yamori presenting paper on the Current Update on Health Benefit of Soyfood Consumption in Reducing Risk of Diseases. While Dr. Susianto presenting paper The Role of Soyfood for Vegetarian Diet. He explained Soy foods play an important role for healthy vegetarian diets especially vegan. Soyfoods are abundant in all essential amino acids and contains far greater amounts of phytoestrogens than any other food. Soyfoods are also rich sources of lecithin, saponins, phytosterols, fiber, numerous vitamins, minerals and phytochemicals. The American Dietetic Association stated that appropriately planned vegan diet including other types of vegetarian diets, are healthful, nutritionally adequate, and may provide health benefits in the prevention and treatment of certain diseases.

The second session was started after coffee break, moderated by Dr. Agastya Wisnu Wardhana from the Indonesian medical nutritionist Association and consisted of two speakers; Dr. Tirza Z Tamin, from the Physical Medicine & Rehabilitation Department, Medical Faculty University of Indonesia and Prof. Made Astawan, from Bogor Agricultural University. Dr. Tamin presented paper on Comprehensive Management of Obesity, a Physiatrist Perspective. She emphasized the obesity management toward increase active lifestyle and improves feeling of well-being, including diet management rich in fiber such as fruits, vegetables and soyfood products. Prof. Astawan presented paper on Fermented Soyfoods in Indonesia – Overview and Health Research.

The participants were actively participated during the discussion session, however due to limitation in time only several participants could be involved in the Q & A in each session.
Participants of the seminar; 220 health professionals (medical doctor and nutritionist)

Speakers of the 1st session: Prof Yukio Yamori and Dr. Susianto, moderated by Dady Maskar

Speakers of the 2nd session: Dr. Tirza tamin and Prof. Made Astawan, moderated by Dr. Agastya Wardhana
2.2 National Tempe Seminar in Salatiga, 20 September 2011

The National Tempe Seminar was held on September 20, 2011, at the Auditorium Satya Wacana University, Salatiga. The seminar was conducted in the conjunction of Indonesian Tempe Forum Quarterly Meeting. The objective of the seminar was to provide update information on the health benefit and product development of tempe to the targeted audience. It was 117 participants attended the seminar from various institutions, such as government, KOPTI members, NGO, academia, industry and students. The seminar session consisted of one keynote speaker, seven oral presenters and 11 poster presenters.

The seminar was officially inaugurated by Dr. Diah Purwanti, expert staff of the Mayor, on behalf of Salatiga Mayor. On the speech, the mayor expressed his proudness of tempe and gratitude the University and ITF on organizing a National level of seminar in Salatiga City. Prof. Rizal Syarief on his remark explained the effort of Indonesian Tempe Forum with the support from ASA IM in improving the tempe condition by two pathways; production side and consumer side.

Prof. Made Astawan delivered keynote speech on update research compilation related to health claim of tempe. The seminar session was consisted of seven speakers from various research institution and universities presenting their new research finding related to product development and health aspect of tempe and soyfood products. As much as 11 posters were also presented in the seminar. Some new product development shows were also presented surrounding the seminar area.

Participants of National Tempe Seminar in Salatiga
3. Training & education to the tempe producer

3.1 GHP Training for Tempe Producer in East Jakarta

The training was held on March 24, 2011 in collaboration with Mercy Corps and was attended by 24 participants. The objective of the training was to provide information on the health benefits and advantages of tempe and GHP concept and its application in the tempe production process. The training was conducted at an informal setting in the evening to accommodate their available time. Mr. Ali Basry delivered his remark on behalf of ASA IM and ITF to open the session. Dr. Made Astawan presented a topic on the nutritional facts, health benefits, and other advantages of tempe. Dady Maskar explained the concept of GHP and how to apply it in the production of tempe. The last speaker was M. Ridha from Mercy Corps who explained the benefits of food grade utensils in the cleaner production of tempe. It was suggested to conduct another session of training to strengthen the knowledge and to allocate more time for discussion and practical work in applying the GHP concept.
3.2 GHP Training for Tempe Producer in Surabaya

The training was held in Surabaya on June 16-17, 2011 in collaboration with Widya Mandala Catholic University with the support from the Local Government of Surabaya City. It was organized in the auditorium of Widya Mandala Catholic University with full facility support from the campus. The objective of the training was to provide knowledge on Good Hygienic Practices and how to apply the concept in the production of tempe. The training was targeted to all tempe producer in Surabaya and was participated by 64 tempe producers in Surabaya.

The ITF GHP Module with some additional topics from the University was applied in the training. First topic with title “All about tempe” was delivered by Prof. Rizal Syarief. Included in this topic are sub topics: history of tempe, development of tempe production technology, globalization of tempe and statistics on tempe consumption and production. Ir. Joeke Hendrasari Arisasmita delivered topic on diversification of tempe product to improve the economic value of tempe. She explained the method and technology to process tempe to second and third generation food products. Prof. Made Astawan, explaining Nutrition value of tempe and packaging method to improve the shelf life of tempe.

The second session of the training on the second day consisted of topics on basic knowledge on food safety and the technical aspect to improve the tempe production
quality. Dady Maskar explained all things related to tempe making process including: raw material, starter (inoculums), preparation area and equipment and several methods of tempe making. He continues with topic on the concept of *Good Hygienic Practices* and the application in the tempe production process.

There was one good exercise applied in this training; it was exercise to cultured microbiological living organism in the human hand before and after washing hand. The objective of this exercise was to provide knowledge to the participants that in the human hand there are naturally contain microbiological living organism that might become a risk for their products (tempe) and show them that by properly washing hand can decrease the number of the living microorganism. At the first day of the training, all participants were asked to touch the plate agar to prove the participants on the microbiological contain in their hand. They were asked to wash their hand properly and put their specimen in the different plate agar. At the 2nd day of the training it showed that in each plate agar growing microbiological colonies and the number of colonies very much lower in the plate agar after washing hand. All participant very enthusiasm and this kind of exercise found to be effective.
4. Tempe consumption promotion

Tempe promotion consumption was directed to highlight the health benefit of tempe rather than just as a source of protein and targeted to middle up level in the community and youth generation of population. The aim of the promotion was to improve the perception of tempe among those targeted population. To promote health benefit of tempe consumption, some educational activities were implemented such as cooking demo, cooking competition and interactive talk-show in radio.

4.1 Tempe Festival: Cooking demo and cooking competition

A Tempe Festival was held on May 8, 2011 on the occasion of celebration Pekalongan City Anniversary. The event was targeted to promote tempe consumption to the general public in Pekalongan City. It was tempe cooking competition, tempe cooking demo and talk show on the health benefit of tempe conducted in Podusugih Market, a biggest traditional market in Pekalongan. The event was conducted in a good time and location;
it was Sunday, a holiday and shopping time, the event was attracting people in the traditional market. The objective of the event was to promote tempe as one of health food and to educate general public on how to develop tempe to become an interesting and tasty food. In general, the respond from the participants to this event is good, people were interested to listen and observe the demo by Chef Rina from Indonesian Culinary Board, Jakarta. It was explained how to develop tempe to several interesting and tasty food, such as pie cake and smoothie tempe drinks.

The tempe cooking competition was participated by 18 participants. There were so many creative mother who, from a regular tempe could be developed into several types of interesting recipes such as sausages, roll cake tempe, tempe nuggets and tempe cookies. The menus developed by the participants were enrich the culinary aspect of tempe development, some are mixing flavors and will not realize if it is tempe on it. Some other menus were so beautiful in appearance so it could arouse appetite.

Prof. Made Astawan, as one of the jury admitted, amazed and proud of the creation of the mother of processed tempe in this event. Such refined menu of steak, lasagna, rollade, and pudding tempe will able to inspire the mothers and professionals to make an alternative dish from tempe. It is hopefully that tempe be enjoyed by all walks of life, especially the upper class who are not familiar with the tempe. Mrs. Bilqis Basyir, the wife of Pekalongan Mayor was also attended the event. She also impressed with the event, she said that tempe is not just a healthy, as showed in this event, tempe would be present in a variant and more prestigious menus. She hopes that result of this competition could be further developed so tempe could have more economic value.

It is suggested to put all recipes created by participants in one good documented book, so it can be a tool to educate general public to develop tempe from many different ways. It is hopefully can improve the image of tempe and at the end will increase the level of tempe consumption by population in Indonesia.

The last session of the event was an interactive talk-show on the health benefit of tempe. Dady Maskar and Prof. Made Astawan explained the nutritional advantages of tempe and its benefit for the human health. It was also socialized the ITF program on GHP training program and implementation GHP concept in the tempe production to improve the hygiene and quality of tempe. It is important to inform the customer that there is an effort to assure quality and safety of tempe. Hopefully the customer will acknowledge improvement done by tempe producers, award the quality and being selective in choosing tempe. So demand from the customers for good quality and hygienic tempe in Pekalongan will increase. The condition will motivate the tempe producer to apply GHP in the process of producing tempe.
Tempe festival and tempe cooking competition

Some culinary creation made from tempe

Tempe cooking demo by Chef Rina from the Indonesian Culinary Board, Jakarta

Audience of the event

The winners of tempe cooking competition

4.2 Interactive talk-show in Radio

A regular interactive talk-show has been conducted in Surabaya. Ir Joek Arisasmita and her team at Widya Mandala University regularly hosted healthy topic talk-show at She-FM. While visited Surabaya on June 16, 2011, Prof. Rizal Syarief, Prof. Made Astawan
and dady Maskar were invited to SHE Radio station to conduct on-air talk-show on the health benefit of soyfood consumption. SHE Radio FM 99.6 is a radio station segmented to woman listener in Surabaya and East Java with target audience woman age 15-65 years old in Surabaya and East Java (http://www.sheradiofm.com/).

The talk-show was conducted live on-air at their prime time at 4-6 PM. The topic discussed was the benefit of soyfood consumption and woman health, the interactive respond from the audience was good. There were a lot of respond during interactive discussion session with audience via phone, SMS and internet chatting. At the same time it was also taken some recording interview to be on-aired on the next session.

The radio station was very good channel to educate consumer on the health benefit of soyfood product such as tempe, tofu, soymilk and soybean snack. It is believe that the messages can reach a huge number of audiences in a segmented group, since this radio station is famous station in Surabaya and targeted to woman age 15-65 years old.
5. Initiation on the proposal submission for tempe as intangible heritage

To initiate the possibilities of Tempe as “Intangible Cultural Heritage of Humanity”, some networking activities had been undergone with relevant institutions such as: Ministry of Cultural and Tourism, Ministry of National Education, Ministry of Health, Ministry of Cooperation and INKOPTI.

Inspired by the UNESCO’s decision to include batik in its list of ”Intangible Cultural Heritage of Humanity” items, Tempe is proposed as another Indonesian heritage to be also included in that prestigious list.

For Indonesians, especially those from the island of Java, tempe as the same as batik holds a unique position in the cultural history and economy of the country. They are regarded as a cultural icon with their own uniqueness. It conveys certain symbols and a profound philosophy, including man’s life cycle, and it has been touted by Indonesia as a non-material element of its cultural heritage. Tempe can be seen to be product of the Indonesian people, it is made from carefully selected ingredients, and making it is an art that has important cultural significance in society as well as being a part of the daily diet. Tempe therefore not just another food, but has a wide array of other qualities. Besides being a valuable and nutritious food, tempe also possesses symbolic qualities and is representative of something with a deep meaning to the Javanese.

At present, tempe is already well known in many different countries, albeit restricted to specific group such as vegetarians and the scientific/food conscious community. Proposing tempe to be listed in the UNESCO’s list hopefully will improve the status of tempe in Indonesia itself and get rid of the poor image some people still associate with it. If Indonesian society can be proud of this food as a product of cultural heritage, then more people will become motivated to take advantage of its future opportunities and high potential as it happen to batik.

6. Visit of Under Secretary to Tempe Pilot Plant in East Jakarta

Under Secretary of USDA Michael Scuse lead a delegation from more than 20 agriculture companies to Indonesia, on April 4-7, 2011. They met with Indonesian government officials, Indonesian companies and field tours to some facilities related to US agricultural products, including tempe production facilities in Cipayung, east Jakarta and SEAFAST Center in Bogor. In the tempe tour, Dadi Maskar, guided the tour and provided an overview of tempe production in Indonesia. United Soybean Board (USB) Treasurer, Jim Stilman, accompanied the Undersecretary’s delegation.

The Under Secretary witnessed himself the production process of tempe with main raw material US soybean. He expressed his proudness that US Soybean contribute significantly to the Indonesian small medium enterprise through tempe production in Indonesia. Indonesia is the biggest tempe consumers and producers which annually around 1.5 million ton of soybeans have been processed into 2.42 million ton of tempe. Tempe production is scattered throughout the country and it is possible to distribute regionally since it already consumed in other countries such as Malaysia, Singapore and Japan.
Tempe is produced mostly by small household industries with a production range of 10 kg–4 metric tons of tempe per day. It is estimated that there are more than 100 000 tempe producers spread out in the provinces of Indonesia. Urban and rural populations, especially in Java, generally consume tempe as a part of their food pattern. As a source of protein, tempe is consumed in greater quantities than other protein sources. Tempe supplies at least 10% of the current protein consumption, while chicken egg supplies 1.25%, meat supplies 3.15% and cereals supply around 60%.

Under Secretary at the tempe production facility
7. Involvement in the development of Tempe Standard for Codex

The Indonesian Tempe Forum has been acknowledged as an expert member of the National Committee for Codex Standard Development for tempe. During 2011 IFT has been actively participating in several meeting of the national committee to achieve the tempe codex standard. Prof. Mary Astuti on behalf of ITF and Gajah Mada University appointed as scientific chairwoman at the National Committee for Standard Development for tempe. The committee consisted of expert from Universities, National Standardization Board, Ministry of Industry, Ministry of Trade, Ministry of Health, Ministry of Agriculture and national Agency for Drug and Food Control. Some representative from private sectors also present in the committee.

8. Indonesian Tempe Forum Website

Indonesian tempe Forum website has been developed with address: www.forumtempe.org. The website is media to publish and communicate all activities undergone by ITF in improving tempe condition in Indonesia. It is also good media to educate general public on the health benefit of tempe, culinary aspect of tempe and all things related to tempe.
ACKNOWLEDGEMENT

The Indonesian Tempe Forum thank to the American Soybean Association International Marketing (ASA IM) for financially supporting the activities of ITF in improving tempe industry in Indonesia. Detail expenditures are reported in Annex.