REPORT ACTIVITY

The Indonesian Tempe Forum
FY 2010

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

The Indonesian Tempe Forum (ITF) through its activities in training, promotion and advocacy has been trying to act as the changing agent for the improvement of tempe production in Indonesia. Entering the 3rd years of its existence, ITF has been acknowledged as one of the important stakeholder in the development of tempe production in Indonesia. Education and training on the application of Good Hygienic Practices in the production of tempe has been adopted as a regular activities funded by Local Government in several important areas of tempe production in Indonesia, such as Semarang, Pekalongan, Surabaya and Jakarta. 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. ITF also put effort in promotion of the health benefit of tempe in order to improve the level of consumption of tempe.

The 3rd Soy Symposium on Health, Socio Cultural and Market Perspective which was held in Surabaya on 2-3 August 2010 was considered as one of important soy event in the Region. Two seminar at National level was also successfully conducted in collaboration with Indonesian Nutritionist Association and MercyCorps International Indonesia. To promote the culinary aspect of tempe various activities were implemented, including training on diversification of the product, cooking demo and competition. Promotion of tempe consumption was also implemented to reach the general audience through talk show in the radio. Continued support and collaboration between stakeholders are needed for a better condition of tempe production in Indonesia.

1. Application of Good Hygienic Practices in the Production of Tempe

The application of Good Hygienic Practices in the tempe production process have been applied in Pekalongan in collaboration with Local Government of Pekalongan City and in Semarang Barat in collaboration with Provincial Government of Central Java. In each area there are three tempe producers appointed as pilot plants and the project supported their plan with some hygienic utensils; stainless steel boiling water, apron, gloves and mask. Training was also conducted several times in each area to equip the tempe producers with sufficient knowledge on the concept of GHP and how to apply it in the tempe production process.

The location of tempe pilot plants in Semarang was located in Kroboakan Village, Semarang Barat, the appointed pilot tempe plants was represent each production capacity that exist in the field; tempe plant wit production capacity 300 kg or more of soybean per day is consider as “big tempe producers”, 100-300 kg of soybean per day is “medium” and less than 100 kg per day is consider as “low”.

In general, the appointed tempe plants has better condition than other regular tempe producers, however there are some aspects in the observed plant need to be improved such as: safety aspects related to pipe gas, ventilation window or exhaust fan for better air circulation, used some wooden tools, and lighting facilities in the production area.

While in Pekalongan there are three tempe producers appointed as pilot plants located in Kuripan Kidul Village. The application of GHP is highly acknowledged by the tempe
producer and they felt happy to implemented it. There are some aspects need to be improved, such as: boiling tools, manual dehulled machine, ceiling, floor and ventilation for air circulation in the processing area.

The Good Hygienic Practices (GHP) concept has been applied successfully in Semarang and Pekalongan with some limitation in the implementation. There are some aspects need to be improved for future implementation of GHP in the tempe production in the future, such as personal hygiene, unhygienic equipment and cleaning procedure. Regular education session and monitoring is needed to be maintained for the sustainable application of the program.

There is a commitment from the Local Government in Semarang and Pekalongan to continue the program to improve the tempe condition. It is a need to increase the number of pilot plant. It is projected that at least one pilot plant exist in each village as a learning point for other tempe producers on the application of Good Hygienic Practices.
2. **GHP training for Tempe Producers in Medan, 10 May 2010.**

The Indonesian Tempe Forum in collaboration with Department of Trade and Industry, Local Government of Medan City has successfully conducted training on Good Hygienic Practices Application in the Tempe Production in Medan on May 10, 2010. The training was targeted to all tempe producer in Medan City and was participated by 39 tempe producers in Medan. The objective of the training was to provide knowledge on Good Hygienic Practices (GHP) and educate them how to apply the concept in the production of tempe. In the tempe production, the elements of GHP are grouped under three headings: personal hygiene of food handlers, the hygienic handling of food and the cleaning and hygienic maintenance of premises and kitchen utensils. Good Hygienic Practice (GHP) is essential in food establishments including tempe production. It provides a minimum degree of safety.

Most of tempe producers in Medan are origin from Java. In the beginning they produce tempe for the Javanese community only, however by the time going tempe consumer now is not only limited to Javanese community only, tempe is now widely accepted by all ethnics in Medan. Tempe becomes an important food commodity in the traditional market in Medan. However, in term of quality, tempe available in the market in Medan is less quality rather than tempe in Java. The problem is they add the skin to the tempe to improve quantity and to cut the production cost. There are some higher qualities of tempe without skin but the price is higher than the regular tempe available in the market.

This is another a good example on implementing Good Hygienic Practices in the Tempe Industry which involve all stake holders in the area. Hopefully this scheme could be duplicated in some other area. Further regular education activities need to be implemented, especially to improve the tempe quality. Some current practices in the tempe production process, such as adding soybean skin into tempe need to be changed to a better practices for the better quality of tempe in Medan.

3. **ITF National Quarterly Meeting & National Seminar on Tempe**

The ITF National Quarterly Meeting & National Seminar on Tempe has successfully conducted on May 20, 2010 at the Acacia Hotel Jakarta. The event was conducted in
collaboration with MercyCorps International Indonesia. The seminar was attended by 100 participants, mostly are tempe and tofu producers from Jakarta, Bekasi, Bogor, Depok and Tangerang. At the same time, it was also conducted launching ceremony of the Tempe and Tofu Pilot Plants which applied Cleaner Production and Good Hygienic Practices. There is one tempe pilot plant and one tofu pilot plant developed by the project. These two Pilot Plants are equipped by new facilities and fully funded by Mercy Corps through their Value Initiative Program. ITF has been involved in the project by providing technical assistance during construction and planning development of the sites as well as conduct several training to the tempe and tofu producers.

The location of tofu factory is in Kampung Utan while Tempe factory is in Kramat Jati, East Jakarta. The tofu pilot plant is also equipped with biogas facility. This is another success story of ITF work in collaboration with Mercy Corps and this project hopefully could be adopted in other cities in Indonesia.

4. **Provincial Congress of Indonesian Nutritionist Association (PERSAGI), June 26, 2010, Jakarta**

The Indonesian Tempe Forum has participated in the Provincial Congress of Indonesian Nutritionist Association (PERSAGI) on June 26, 2010 in Jakarta. ASA IM and Indonesian Tempe Forum involved in the scientific session of the congress by providing two speakers; Dady Maskar and Dr. Made Astawan. The paper presented in the scientific session was “Purine does not reduce the health beneficial effect of soy”. The aim of the presentation was to give better understanding among nutritionist on the relationship between tempe and soybean consumption with Uric Acid/Gout. The Indonesian Tempe Forum was also introduced to the audience including activities undertaken by ITF such as next Soy Symposium in Surabaya and Hygiene training to the tempe producers.

There have been a misperception among nutritionists in Indonesia that consumption of tempe and soyfood products may increase the purine level and therefore tempe and soyfood products are prohibited for patients with gout. In fact, the epidemiologic and clinical evidence suggests that consuming moderate amount of soyfoods are not contraindicated for patients with gout. The afternoon session was dedicated for the election of the new Committee Board of PERSAGI at provincial level. The Congress was participated by about 270 nutritionists’ member of PERSAGI in Jakarta Province.

![Image of Dr. Made Astawan and Dady Maskar presenting the paper.](image-url)
5. Socialization activities & promoting tempe through interactive on-air talk show at the Radio Station

The ITF has been collaborating with GIGA FM 99.6 in promoting the health benefit of tempe in a regular interactive talk show program. GIGA FM is a famous radio station in Surabaya with target audience woman age 15-45 years old in Surabaya and East Java. The objective of this regular program is to promote tempe consumption as well as to socialize the Indonesian Tempe Forum to as many as general population. Mrs. Joek Hendrasari Arisasmita, coordinator of Tempe Forum in East Java with her team has managed this program. Dady Maskar and Made Astawan were also involved as resources person in the program when they visited Surabaya on June.

The talk-show was conducted live on-air at their prime time at 4-6 PM. The topic discussed was various related to tempe and woman health. In each session of the program, 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. The radio station was very good channel to educate consumer on the health benefit of tempe. 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 15-45 years old.

The Indonesian Tempe Forum was also benefited by this radio in promoted the Soy Seminar/Symposium that was held on August 2-3, 2010.

Talk show in the Radio Giga FM 99.6, Woman segmented Radio in Surabaya
6. Involvement in the development of Tempe Standard for Codex

The Indonesian Tempe Forum has been involved in the National Codex Committee for developing tempe standard. On June 7-9, 2010 Dady Maskar and Dr. Made Astawan attended the 10th Meeting of the ASEAN Task Force on Codex (ATFC) in Kuala Lumpur, Malaysia on behalf of Indonesian Tempe Forum (ITF) as members of Indonesian Delegates. The presence of ITF in this meeting was formally requested by Indonesian Codex Coordinator to strengthen the Indonesian position on proposing draft standard for tempe to Asia Codex Committee (ACC). The proposal from Indonesia on draft standard for tempe was fully support by all ASEAN member countries to be submitted to the Asia Codex Committee. There are some data needed as requirement for submission of tempe standard to the Codex Committee, such as trade data (export-import on tempe commodity) and data on tempe consumption in ASEAN Countries.

The Meeting was attended by delegates from Brunei Darussalam, Cambodia, Indonesia, Lao PDR, Malaysia, Philippines, Singapore, Thailand and Viet Nam. Representatives of the ASEAN Secretariat were also present.

The ASEAN Task Force on Codex is a forum for the ASEAN Member States to share concern and information on certain Codex issues of interest. As such, it is important to keep abreast with the development within Codex in order to revise and harmonize national standards and regulation, to use these guidelines to improve food safety measures and procedures and to update the food industry of international requirements in order that they could compete fairly at the international level.

The proposal from Indonesia on Draft for Tempe Standard was adopted as one of the point to be raised at the Joint ASEAN Position on Codex Issues Related to Trade in Commodities and Agriculture. Indonesia requested ASEAN Member Countries to support the proposal on the development of a draft Codex standard for tempe. The previous Meeting of the ATFC was informed that Indonesia had introduced a proposal for new work on the development of a standard for tempe and tempe products at the 16th CCASIA (Codex Committee Asia).

ITF participate as member of Indonesian delegates at the 10th ATFC Meeting
7. Promotion of Tempe through Cooking Festival & Cooking Demo

The Indonesian Tempe Forum in collaboration with Widya Mandala Catholic University and Giga FM Radio Station conducted one day event “Tempe Creative Festival” on July 25, 2010. It was tempe cooking competition, tempe cooking demo and talk show on the health benefit of tempe conducted in the Atrium of Jembatan Merah Plaza, a biggest shopping center in Surabaya. The event was conducted in a good time and location; it was Sunday, a holiday and shopping time, the event was attracting so many people in the plaza. It was good publication for tempe consumption in a big city like Surabaya.

The tempe cooking competition was participated by 43 participants. Who would have thought when in the creative hands of the mother a regular tempe could be developed into several types of interesting recipes such as sausages, roll cake tempe, tempe nuggets and tempe salad. The menus created by the creative mother as general category were as good as created by the professional category. The menus developed by the participants were varies and far away beyond the expectation, 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, 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.

Another jury is Mr. Bagoes Soepomo, Director of Surabaya Hotel School (SHS), he also impressed with the spirit and the results of the creation of menu from tempe. He said the event is proving that tempe to be serving anything, starting from pastry, until the main course, and all menus have a distinctive flavor. Mrs. Dyah Katarina, Surabaya Mayor's wife 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.
There were two categories in the competition and, below is the winner for each category.

General category
- Winner 1 – Windha Oktana (Menu Dunia Aneka Tempe)
- Winner 2 – Sulistyowati dan Atus (Kue Kering Tempe Seledri)
- Winner 3 – Rizki Indiati (Roll Cake Balut Keripik Tempe)
- Winner 5 – Wahyu Insetiati (Salad Nugget Tempe Ceria)
- Winner 6 – Endang Sapriatiningsih (Pudding Tempe)
- Winner 7 – Supiyah Djaelani (Rol Steak Tempe)
- Winner 8 – Widyaningtyas (RAUL KD ATHA – Rollade Keju dan Tempe)

Professional/Chef category
- Winner 1 – Mercure Grand Mirama Hotel Surabaya (Aneka Kreasi Tempe)
- Winner 2 – Tabloid Koki (Lasagna Tempe Yummy)
- Winner 3 – PHC Surabaya Hospital (Tempe Bambu Runcing)
8. The 3rd Soy Symposium: Health, Socio Cultural and Market Perspective

The Indonesian Tempe Forum in collaboration with Widya mandala Catholic University Surabaya has successfully conducted two days event; The 3rd Soy Symposium: Health,
Socio Cultural and Market Perspective on August 2-3, 2010 in Surabaya. The Symposium was attended by about 180 participants from various institution such as National and Local Government institutions, academia and researcher, health professionals (nutritionists and medical doctor) as well as participants from the Food Industry. Opening and welcome remarks were delivered by Prof. Rizal Syarief on behalf of the Indonesian Tempe Forum and Prof. Ami Suwandi, Rector of the Widya Mandala Catholic University.

It was also dedication and ITF Awards for individuals who give significant contribution to the development of tempe in Indonesia and international, those awardees are
- Dr. Ahmad Basyir, Mayor of Pekalongan City
- Drs. Bambang DH, Mayor of Surabaya City
- Prof. Darwin Karyadi, Bogor Agricultural University
- Prof. Mary Astuti, Gadjah Mada University
- Mr. Ali Basry, ASA IM Indonesia
- Mr. Dennis Voboril, Agricultural Counselor, FAS, US Embassy.

The first session on the Overview and Current Soy Consumption Status was chaired by Prof. Purwiyatno Haryadi, Director of SEAFAST Center, Bogor Agriculture University, consisted of two speakers; Mr. Peter Golbitz from SunOpta, USA presented paper on Global Soy and Soy Products Markets Development - Consumption, Trends and Innovation. The second speaker was Prof. Hardinsyah from the Bogor Agriculture University, Indonesia presented Soy and Soyfood Consumption in Indonesia – Economics, Nutrition and Cultural Perspectives.

The second session on Soyfood Consumption and Health was chaired by Dr. Widjaja Lukito from the University of Indonesia. Dr. Mark Messina, Nutrition Matters, USA presented paper on Soy Health Benefits – Evaluating the Science, Overcoming the Myths. Prof. Woon Puay Koh, National University of Singapore, Singapore presented paper on The Benefit of Soy in Breast and Colorectal Cancer – Evidence from Singapore Studies. And Dr. Shaw Watanabe, Soy Nutrition Institute Japan presented Soy as Functional Food - Health Research and Regulatory Update.

The third session on Soy Product Innovation and Market Challenges was chaired by Prof. Mary Astuti from the Gadjah Mada University, Indonesia. Mr. Eddy Kamenadi from PT. Sari Husada/ Nutricia, Indonesia presented Indonesian Soyfood Market - Industry’s Perspective on Innovation and Market Challenges. Dr. Hans Stein, National Soybean Research Laboratory, USA presented paper on Community Soy Nutrition and Production Improvement Program. And Mr. Lai Kit Mun, Soya Knowledge Center, Tetra Pak SEA Ltd., Singapore presented paper Soy Beverage Trend in Asia - Quality, Innovation and Market Perspectives.

The last session on the Cultural and Social Aspects - Barriers and Opportunities for Soy and Tempe was chaired by Prof. Rizal Syarief, Bogor Agriculture University. Dr. Suyanto Prawiroharsono, Agency for the Assessment and Application of Technology, Indonesia presented Fermentation and Biosynthesis of Functional Active Compounds in Tempe – Opportunities and Challenges for Products Application. Two speakers shared their experience in Community Soy Nutrition and Production Improvement Program – Partnership to Making a Difference; Mr. Dady Maskar, ASA IM Indonesia/ Indonesia Tempe Forum, Indonesia presented Tempe GHP Training and Model Production
Program and Mr. Ifansyah, Mercy Corps International, Indonesia presented Sumatra School Soy Milk and Java Tempe Production Project. Mr. Amita Buissink, tempe producer from Australia shared his experience in Developing and Marketing Tempe in Australia. Last speaker was Prof. Agustinus Ngadiman, Widya Mandala Catholic University Surabaya, Indonesia, Presented Harnessing Tempe Cultural Heritage and Technology Advances – Opportunities in the Next Decades

9. Fermented Soyfoods Seminar, August 3rd, 2010

The half day seminar on Fermented Soyfood on the 2nd day was participated by invitation participants only, it was about 60 participants attended the seminar. The seminar was chaired by Dr. Widjaja Lukito from the University of Indonesia. Mrs. Boon Yee Yeong, ASA IM, Singapore opened the session by welcoming all participants and gave introductory speech on the objective of the seminar. First speaker was Prof. Made Astawan, Bogor Agriculture University; The Indonesian Tempe Forum presented Fermented Soyfoods in Indonesia – Overview and Health Research. Second speaker was Mr. Nurahman, Gadjah Mada University, Yogyakarta, Indonesia presented The Antioxidant Activities of Black Soybean Tempe Fermented by Different Inoculums. Third speaker was Prof. Kuniyasu Soda, Jichi Medical University, Japan presented the overview and research update on Soy and Natto Derived Polyamines in Japan. Ms. Masako Tateishi from the ASA IM, Japan presented paper on the Fermented Soyfoods Market in Japan – Trends and Innovation.

The second session was Panel Discussion which was moderated by Prof. Made Astawan, with Mrs. Boon Yee Yeong, Dr. Mark Messina, Prof. Rizal Syarief, Dr. Widjaja Lukito and Dr. Shaw Watanabe as panel members. The panel was discussed the opportunities and challenges on Fermented Soyfoods in Asia.

Upon completion of the ½ day Fermented Soy seminar a field visit to a tempe & batik production area was arranged. The participants had opportunity to observed the tempe production process. After visited tempe production area, visit to hand made batik was also arranged.

Participants of the Fermented Soyfood seminar
Prof. Kuniyasu Soda, Jichi Medical University, Japan

Ms. Masako Tateishi, ASA IM, Japan

Panel discussion
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.