

SETUPdates

DOST to launch natl. program for tropical wines and distilled spirits

Madrigal assures belabored industry of aid

Wine making go back a long way in countries like Egypt, Greece, France, Australia and the US. In the Philippines, local wine and spirits drinking are rich in culture and tradition, and certainly worth preserving. *Lambanog* or coco vodka is the most popular alcoholic drink in the Southern Tagalog provinces of Laguna, Batangas and Quezon. *Tapuy* or rice wine is culturally rooted in the celebration of bountiful harvest in the *Lang-Ay* festival of the people in the Mountain Province. Sugarcane wine or *Basi* is almost synonymous to the Ilocos region. Century old customs of celebrating life and its joys have thus become synonymous with wine making and drinking.

In a report by Virola as cited by Dizon in 2004, it shows that in 1998 the Philippines produced only about 1.25 million liters of alcoholic beverages compared with importation of about 3.5 million liters in 1999. This excludes about 3 million liters of grape-based wine reportedly consumed every year, all of which are imported. In addition, wine consumption increases by 10 percent every year. The increase is attributed to growing appreciation of wine as health beverage. Local production however is minimal due to seasonality of fruits, sustainability of raw materials, lack of marketing and promotion, poor packaging, and labeling among others.

Despite these, the inventory of local wines and spirits is rich in variety and flavors. It includes *lambanog* from coconut sap or *tuba*, *basi* from sugarcane, *tapuy* from rice, *laksoy* from nipa palm, and wines from various tropical fruits such as bignay (Philippine wild berry), lipote, duhat (Philippine plum), passion fruit, banana, dalandan, guyabano, mango, tamarind, marang, and calumpit. Local wine makers further remain enthusiastic.

The Department of Science and Technology saw the inadequacy of local ventures and decided to bridge the disparity between supply and demand. Together with DTI, CITEM and other LGUs, DOST, through its regional offices, start upgrading and promoting the various traditional wines and spirits unique to each region. Among these are the Philippine *Lambanog*, Mango Wine, and *Basi*.

The effort was successful but the requisites of the task necessitated more. DOST thus draft a comprehensive program to strengthen and encompass all local wines and spirits in the country. The objective is to develop competitiveness of local tropical wines and distilled spirits by upgrading and developing new products, and providing additional livelihood opportunities. It also aims to firm up government and private sector participation in boosting and protecting the industry from future unscrupulous foreign entrepreneurs which might produce imitations of Philippine wines and distilled spirits.



Local distilleries work on adding flavor to *Lambanog* beginning with coffee, cinnamon and blueberry. *Lower right:* PHILSTAR

awarded Philippine *Lambanog* the 2001 Packaging Excellence Award, Beverage Category, an annual competition organized by the Packaging Institute of the Philippines.

DOST shall provide direction and technical assistance through its Regional Offices to be spearheaded by Dr. Alexander R. Madrigal, regional director of DOST Regional Office No. IV. Quoting Usec. Maripaz L Perez's message during the DOST IV 2006 NSTW Regional Celebration with the theme *Wine Bouquets: Harmonious Blends of Tropical Fruit Wines and the Philippine Lambanog* she stated that "...improving the wine industry can be a way of moving science and spreading cultural beliefs through taste."

Dr. Madrigal listed three components of the national wine and distilled spirits program as follows:

1. Inventory/Assessment of the local initiatives for tropical wines and distilled spirits of the food and beverage industry;
2. Development of strategic S&T intervention and value adding agenda; and
3. Early winners/Deliverables to jump start industry enhancements.

In Region IV, the project is tapping the wide coconut plantations and local expertise of Tayabas, Quezon, namely, Joselito Mallari of Mallari Distillery, Isabelita Capistrano of Capistrano Distillery, and Dory of Dory's Wine Distillery.

Wine producers like Elbert Pigtañ of Oriental Synergies Export Corporation (OSEC) and Grace Araño of Patubas Corporation joined the task force for Region IV. Mallari Distillery is producing *Lambanog* based mango liqueur and bignay liqueur. Capistrano Distillery is planning to produce *Lambanog* with rose and other essences. Dory's *Lambanog* is working on *Lambanog* with coffee cordials much like the brand "Baileys". Lastly, Patubas Corporation has been producing *Lambanog* based tropical fruit blends (mango and bignay).

Lambanog-based tropical fruit wines differ from the more-widely produced flavored *Lambanog* in that the former uses real fruits while the latter uses artificial flavors and essences. Also widely available are tropical fruit wines but with no *Lambanog* as base. Dr. Madrigal is thus developing a new market for a new product. Spurred by the wide international acclamation received by fruit wines developed by OSEC, Dr. Madrigal advocated the idea of combining *Lambanog* with tropical fruit wines.

The provincial S&T center in Quezon, in cooperation with DTI IV, CITEM and DOST-ITDI, initiated standardization of process and packaging of pure *Lambanog* using the brand name Philippine *Lambanog* in 2000. Mallari, Buncayo and Capistrano Distilleries sold more than 10,000 bottles that year. They exported to Japan the following year where they joined the *ASEAN Food and Beverage Mission*. Philippine *Lambanog* is recipient of the Packaging Excellence Award (Beverage Category) for best packaging design and technology during PHILSTAR 2001, an annual competition sponsored by the Packaging Institute of the Philippines.

OSEC on the other hand sells its wines using the tag Mijiah Tropical Fruit Wines. Its duhat wine, bignay wine, guyabano wine and mangga wine received awards during the 11th Concours Mondial de Bruzelles in Brussels, Belgium in May 2004. It also placed first in the Trendy Awards, International Food Exhibit in Manila in May 2004 and chosen as one of the Best 15 Products of the World during the National Food Week in Utrecht, Netherlands in April 2005. Lastly, it placed second in the Specialty Wine Category Competition during APEC 2005 in Jeju, Korea in May 2005.

Mijiah wines also represented the country in Aichi Expo 2005 in Aichi, Japan from March to September 2005 and the ASEAN Food and Beverage Exhibit in Tokyo, Japan from October to September 2005. To date, "...this is the only local industry not being copied yet in Asia,"

Pigtañ of OSEC said. He expressed his eagerness to participate in the project because he thinks that this is the best time to work together to improve the wine industry. He added that being the eighth wine exporter in Asia, the Philippines could use wines to become better known internationally. "Dr. Madrigal and I also plan to produce carbonated/sparkling tropical wine from bignay, mango, duhat and coco wine," he enthused.

On April 11, 2007, DOST Secretary Dr. Estrella F. Alabastro will lead launch of the DOST High Impact Program (HIP) on Tropical Fruit Wines and Distilled Spirits at the Hotel Supreme in Baguio City. The national program will highlight wines and spirits produced in CAR, Region I and Region II. The Ilocos Region will re-introduce its *Basi* or sugarcane wine while the Mountain Province will route for *Tapuy* or rice wine. The day's activities include a technical session in the morning with industry experts as speakers. This will be followed by presentation of the program HIP in the afternoon. DOST will furthermore play host in an early evening cocktail/banquet. It scheduled a Bartenders and Connoisseurs Night, and Food and Wine Pairings.

The activity in Baguio City will initiate series of product unveilings that will feature characteristic regional wines and distilled spirits with the next to feature wines in Southern Luzon. This will immediately be followed by similar activities in the Visayas and Mindanao. For other wines and distilled spirits, major plans in the offing are:

- Development of a prototype of a double distillation equipment for *Lambanog* and nipa wine;
- Development of a generic packaging for bottled tropical wines and distilled spirits;
- Establishment of a sustainable community resource raw material base and supply of wine yeast;
- Creation of a national industry organization for tropical wines and distilled spirits with corresponding industry champions; and
- Development of a national commodity marketing and communication plan for tropical wines and distilled spirits.

µ (GAVeluz \ AMGuevarra \ DOST IV-A S&T Media Service)

DOST-PTRI develops machine for handloom weaving

"Lean and mean" weaving machine would aptly describe this handloom with a double sley picker mechanism designed by experts of the Philippine Textile Research Institute. The picker mechanism enables the loom to simultaneously weave two narrow fabrics with different designs and with selvages on both sides of each fabric.

Majority of weavers in the country use the 40-inch width handloom to produce shawls, table runners, place mats, and other narrow width fashion items. But this preference apparently overlooks the fact that weaving 20-inch width fabric in a 40-

inch loom inevitably results to 50 percent wastage of the loom's productive capacity.

To overcome the deficiency, some weavers weave a 40-inch fabric open at the middle to be cut afterwards to produce two narrow-width fabrics. The cut portion is sewn to prevent unraveling. Obviously, the fabric will not come out looking like a customized hand-woven novelty but would look simply like a swatch taken out and sewn from a mechanically produced wider material.

The new PTRI-designed weaving machine could benefit no less than 1,500 handloom weavers in Regions I, XII, and CAR who still use the conventional throw and catch shuttle technique along with a production rate increase of as much as 160 percent. µ(MFlores \ DOST IV-A S&T Media Service)

Why children, average Filipino eat less fruits and vegetables

Many mothers bewail their children's difficult fruit and vegetable eating behavior. Fruits and vegetables are packed with vitamins and minerals, dietary fiber and phytochemicals that are beneficial to health.

Consumption of fruits and vegetables however remains low particularly among children, a situation confirmed by results of the 2003 Food Consumption Survey of the Food and Nutrition Research Institute (DOST-FNRI).

The survey, the most recent on the subject, showed per capita intake of fruits at 53 grams in 2003 compared to 104 grams in 1978. Intake of vegetables



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also dropped from 145 grams to 110 grams during the same period. The low intake of fruits and vegetables can be attributed to rising prices of food and other basic needs of families such as housing, education, healthcare, and other utilities.

The survey also revealed that the ordinary Filipino spent the bulk or 68 percent of the budget for food on meat (30%) and rice (37%). This means that only 33% of the food budget is spread on all other food needs. The same spending pattern was also recorded 10 years ago based on the 1993 Food Consumption Survey, which found that the average Filipino's budget for food was spent mainly on rice and meat at 29 percent and 37%, respectively.

In the 1993 and 2003 Food Consumption Surveys, the food peso value for vegetables remained the same at 8 percent, of which 2 percent was apportioned for green, leafy and yellow vegetables. The remaining 6 percent went to other non-leafy vegetables.

Food peso value for fruits declined from five percent in 1993 to three percent in 2003. Vitamin-C rich fruits had a share of only two percent in 1993 and dropped to 0.8 percent in 2003. It came as no surprise that mean per capita nutrient intake of iron, calcium, riboflavin and vitamin C reached less than 80 percent of the requirement. The result of the survey is consistent with the low intake of fruits and vegetables that contain such nutrients.

Moreover, the survey results showed that iron deficiency anemia remains a public health problem among children 6 months to 5 years old, and 6 to 12 years old at 32% and 37% prevalence, respectively. There was also a three-fold increase in obesity from 1998 to 2003 among children 0 to 5 years old, from 0.4 % to 1.4 %.

Among the 6 to 12 years old, obesity increased from a negligible rate in 1998 to 0.4% in 2003. Obesity's increasing prevalence could be associated to children growing accustomed to fast food diets. [μ\(MGuirindola \ DOST IV-A S&T Media Service\)](#)



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