Hibla

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Philippine Abaca helps in global environment conservation

The Abaca is a vital crop to the Philippine economy in a big way. In fact, it is vital to the world's economy and environmental care as well.

The Philippines is the largest producer of Abaca fibers supplying about 90% of the world's requirement for the production of cordage, specialty papers (for currency note, stencil paper, teabag, coffee filter/cup, capacitor and insulation paper, etc.), textiles, furniture, handicrafts, novelty items, meat casing, and composites for automotive and construction and other industrial products.

For the past half-decade, the Abaca industry helped boost the country`s economy from its export earnings with an annual average of P4.7 billion. In the countryside, Abaca fibers are cultivated across 176,549 hectares of farmlands by over 122,758 farmers. And in recent years, it was perceived that aside from the substantial contributions of Abaca to the economy, its utilization can also provide numerous ecological advantages.

Environmental benefits

The Philippine Abaca plays a vital role in the growing global advocacy for environmental protection and forest conservation. The strong worldwide interest and acceptability for "green" and "organic" products made manufacturing companies, especially in the US and Europe, turn to natural and bio-degradable raw materials like Abaca. Being the strongest among all natural fibers and having superior qualities over other materials, abaca fibers are preferred over man-made fibers such as plastics and other synthetic materials by various industries around the world.

Navies, merchant shipping companies and industries engaged in oil dredging/ exploration highly prefer Abaca cordage because of its non-slipping characteristics and non-damaging effect to the marine ecosystem. Likewise, pulp and paper industries post strong demand for abaca pulp over wood pulp because of its durability and recyclability. Abaca papers can be recycled several times more than paper from wood or other natural fibers.

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Abaca fibers are used to produce teabags, currency notes and meat casing.

PhilFIDA IX joins ASAPP in Sulu

The government launched this year the Accelerated and Sustainable Anti-Poverty Program (ASAPP), a public-private partnership model, to accelerate measures to reduce poverty and boost economic growth initially in ten identified provinces with high poverty incidence levels.

Under the ASAPP, the poor communities will be matched with private companies which may need human and material resources to increase the poor's employability in business. This program will have strong partnership with the private sector wherein the government will work on trade facilitation and market linkages to allow the poor to supply the needed raw materials and provide inputs and services needed by bigger businesses. According to the National Economic and Development Authority (NEDA), the ASAPP will try to address socio-economic gaps among Filipinos involving private sector to create massive employment so that those currently considered below the poverty threshold can be included in the growth process.

As part of the program's launching, the PhilFIDA Region IX participated in a series of kick-off activities in the province of Sulu last 13-14 August 2015. The event was organized by the office of Atty. Asis Perez, Department of Agriculture Undersecretary for Fisheries and Concurrent National Director of the Bureau of Fisheries and Aquatic Resources (BFAR), the Lead Agency Convenor - Interagency Committee for Sulu Province.

The program was launched through a caravan in the municipalities of Maimbung, Parang and the island municipality of Panglima Tahil.

The caravan was done one municipality at a time which started with consultations and dialogues with the people. In his speech, Undersecretary Perez emphasized the new strategy adopted by the government to fast track development in Sulu by bringing its services to the people. "This event is the beginning of long lasting and sustained efforts of the government through the different participating agencies to directly engage with the people of Sulu," Perez said.

To revitalize the interest of the Sulu constituents on abaca, the PhilFIDA conducted a fiber-based handicraft making demonstration for the farmers and their families. The livelihood demonstration created curiosity and enthusiasm to some interested attendees who learned transforming abaca fibers into small twines, bags and other handicrafts.

Sulu is among the ten provinces classified as category 1 with high number of poor families in the updated Philippine Development Plan 2011-2016 along with Pangasinan, Negros Occidental, Ilo-ilo, Quezon, Cebu, Leyte, Zamboanga, Davao del Sur and Camarines Sur, according to the statistical data of the NEDA.

PhilFIDA engages in Bt cotton production

The Agency has recently concluded the multi-locational field trials of Bt-cotton in Luzon and Mindanao and results of the trials are promising as regards to the revitalization of the cotton industry in the country. The Bt-cotton could yield 3 tons per hectare compared to the 1-2 tons with the present local commercial varieties.

With the conclusion of the multi-locational trial, the Agency will apply for its commercialization with the Bureau of Plant Industry (BPI). The agency expects to get its approval before the end of this year and proceed with its techno-demonstration with the cotton producers starting in Mindanao (Sarangani and South Cotabato), then in Luzon (Ilocos Region and Nueva Ecija), involving forty 1-hectare cotton farms. The PhilFIDA Research Division has arranged with the technology developer from India to provide Bt-cotton seeds for these forty techno-demo farms for

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PhilFIDA collaborates with UP Diliman to enhance virus detection technology for abaca

This year, the PhilFIDA collaborated with the National Institute of Molecular Biology and Biotechnology (NIMBB) of the University of the Philippines (UP) Diliman in a research project on enhancing the virus detection technology for abaca diseases. This project aims to come-up with an improved technology in detecting viruses to attain an efficient and sustainable abaca disease management system.

The DA-Bureau of Agricultural Research (BAR), through its Biotech Program Office, provided funds amounting to P8.3 million for this project which is targeted to deliver results by January 2018. For 2015, the DA-BAR initially downloaded P4 million to PhilFIDA to start out the conduct of research.

From this project, the PhilFIDA Research Division and UP-NIMBB is expected to develop:

- Improved protocol on antigen production using fused protein genes;
- Optimized technology on antiserum production for the detection of abaca bunch-top virus (ABTV), banana bunchy-top virus (BBTV), banana bract mosaic virus (BBrMV) and mosaic virus in abaca (SCMV-strain);
- Improved nucleic-acid based detection techniques for abaca viruses; &
- Scientific publications and brochures of the technology.

This research project is expected to make the Philippines self-reliant in the production of antisera for the detection of abaca viruses. The technology will help in the early detection of virus diseases which is important in the production and distribution of disease-free planting materials needed for the abaca rehabilitation and expansion program of the agency. Further, all data generated from this research will be significantly helpful in the development of a genetically modified abaca which is aimed to effectively combat viral disease infection.

Secretary Alcala visits PhilFIDA

Officials and employees of the PhilFIDA had a dialogue with the Department of Agriculture Secretary Proceso J. Alcala last August 18, 2015. The Secretary's visit was arranged for a give-and-take session with the PhilFIDA personnel on the needs and concerns of the fiber industry.

Some major concerns lobbied during the dialogue were focused on prioritization and funding of abaca projects for the rehabilitation and expansion of tissue culture laboratories, establishment of gene banks, disease management, post-harvest facilities, upgrading of regional offices and development of R & D Centers for fibercrops at existing PhilFIDA properties.

The Secretary raised the importance of determining the cost of production for all fibercrops and the potential income of farmers per hectare for every crop. He said he wants to see proofs that projects are feasible and justifiable to be prioritized for funding.

"The government should not just ask the farmers to plant a certain crop, we must show them how much they will earn from it. *Ipakita natin alin ang malakas ang demand, saan sila kikita at dapat maganda ang kita," Secretary Alcala added.*

From left: *PhilFIDA OIC-Executive Director Clarito Barron, DA Secretary Proceso Alcala and PhilFIDA OIC-Deputy Executive Director Petronilo Jabay during the dialogue at PhilFIDA Central Office in Quezon City.*

For the transformation of PhilFIDA properties into R & D Centers, he required the PhilFIDA to submit a plan and stressed that the properties must be turned into self-liquidating research centers for the benefit of the government and the fiber industry. He also mentioned the necessity of maintaining a gene bank as a source of planting materials readily accessible for all stakeholders.

Secretary Alcala encouraged the PhilFIDA personnel to utilize the geo-tagging technology in mapping out production areas and project sites. This can aid the agency in capturing the entirety of areas for pest management programs. PhilFIDA Regional offices must collaborate with DA RFUs for their disease eradication projects since the Department has allotted funds for pest management.

To support the domestic utilization of abaca, the Secretary directed PhilFIDA to provide data for his official letter for the Central Bank requesting to increase the percentage of composition of abaca fibers in all Philippine peso currency notes.

PhilFIDA conducts First National Regulatory Conference

The Regulatory Division, headed by its Chief Romeo Jr. O. Bordeos, held the PhilFIDA's First National Regulatory Conference early this year in Antipolo City.

During the event, the PhilFIDA collaborated with the Bureau of Plant Industry (BPI) in developing guidelines for the accreditation of plant nursery and tissue culture laboratories. These guidelines shall be recommended by PhilFIDA upon the approval of the Secretary of the Department of Agriculture. Also, the approved Rationalization Plan, under the Executive Order 366, has added the accreditation of machine fabricators as one of the functions of PhilFIDA and the agency has also embarked on the drafting of its protocol for its implementation next year.

Dr. Andrea B. Inocencio, DPA, and Mr. Danilo T. Dannug were the BPI experts who provided knowledge on the accreditation systems for crops during the conference. They will be PhilFIDA's partners in establishing the abaca nursery and laboratory accreditation systems to ensure the production and distribution to farmers of quality and true to type recommended varieties resistant from pests and diseases.

According to Dr. Inocencio, the accreditation scheme would be advantageous to the industry since this will serve as a tool to control the spread of disease because purchases cannot be done from just about everywhere, buying can only be made from accredited growers.

As embodied in RA 7308 known as the Seed Industry Development Act of 1992, Mr. Dannug, explained that to ensure the distribution of clean planting materials, abaca nurseries should be accredited. *"It is important to disseminate clean planting materials so the trust of farmers is established and also it can manage and prevent the spread of the systemic disease,"* Mr. Dannug added.

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Philippine Abaca...from page 1

The Abaca remains to be a good substitute for coniferous pulp in most paper products with a utilization ratio of 4 to 1, owing to Abaca's superior tensile strength and mechanical properties. Majority of the world's pulp and paper companies using wood pulp has an estimated global demand of 200 million metric tons. This is equivalent to about 50 million metric tons of abaca pulp.

An increased utilization of abaca pulp as raw material by paper manufacturing companies can greatly aid in addressing deforestation. An Abaca plant can be harvested to produce useful fibers after two years from planting. Within its short term cultivation, the Abaca farmers can produce the natural materials repeatedly needed by various industries thus saving more trees worldwide.

Abaca is a suitable plant to be incorporated in reforestation farming system. The plant can assist in improving biodiversity conditions if intercropped with coconut palms and other tree species within former monoculture plantations and rainforest areas. Planting Abaca can also aid in minimizing erosion and sedimentation problems in coastal areas which are breeding grounds for sea fishes. The plant can effectively improve the water holding capacity of the soil therefore it can prevent floods and landslides as well. Further, the Abaca does not deplete soil as much as other plants and requires less land for its production. Abaca waste materials are used as organic fertilizer by farmers.

Industry prospects

The move to shift back to organic and natural raw materials of most industries from environment conscious countries opens limitless opportunities for the Abaca. The worldwide advocacy for ecological sustainability strengthens the market potential for abaca fibers in the pulp and paper industry, cordage sector, in the composite market, and even in lifestyle products .

The automotive sector showed increasing new demands for Abaca fiber. According to the Food and Agriculture Organization (FAO) of the United Nations, Abaca fibers are considered the best replacement for glass fibers as a strengthening agent in multiple automotive parts. It can reduce the weight of automotive parts and facilitates more environment-friendly production and recycling of parts.

Before, the abaca is only used for 'soft' applications in the automotive industry as filling materials for bolster and interior trim parts. But with its extremely high mechanical strength it is now also used for 'harder' applications for exterior semi-structure components and reinforced plastic parts.

Seeing the extensive environmental degradation, countries like Japan are also eliminating the use of plastics and replacing PVC with natural fiber materials. Developments in the composite market may require volumes of abaca for the production of telephones, sporting goods and orthopedic materials such as joint replacements and fracture healing implants.

Abaca consumption worldwide is predicted to increase due to the introduction of new technologies as well as the rising demand for new industrial uses of abaca fibers. Considering its extremely high tensile strength and versatility for the manufacture of a wide range of eco-friendly products, the Philippines will continue to dominate the global Abaca trade and will stay as the Abaca capital of the world for generations.

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The development of the National Standard (PNS) for Hand & Spindle-Stripped Abaca Fiber and Decorticated Abaca Fiber was also presented in the conference. Mr. Farlash D. Pancho from the Bureau of Agricultural and Fisheries Standards (BAFS) discussed the draft PNS for Abaca fibers which aims to insure fiber quality, consumer safety and environmental protection. The PNS is targeted to be finalized and implemented by 2016.

Dir. Clarito M. Barron, Ph. D. CESO IV, Officer-in-Charge of the PhilFIDA, said that the agency should also work on the registration of commercially planted abaca varieties at the National Seed Industry Council (NSIC) and will conduct a national field trial to determine yield and resistance of abaca to pests and diseases before registration.

The conference allowed all Philippine fiber inspectors nationwide to convene and discuss measures in addressing issues in the field specifically pertaining to fiber standards and quality. Fiber inspectors were updated on existing and new regulatory policies being adopted not only for abaca but also for other fibercrops with the aim to harmonize their strategies in instituting regulatory reforms.

PhilFIDA: Merging FIDA & CODA

The Philippine Fiber Industry Development Authority (PhilFIDA) was created on May 29, 2013 through the consolidation of the Fiber Industry Development Authority (FIDA) and Cotton Development Administration (CODA) as part of the Department-wide Rationalization Plan (DA-RP) of the Department of Agriculture.

The PhilFIDA is mandated to promote the accelerated growth and development of the Philippine Fiber Industry in all its aspects through research development, production, fiber utilization, standards implementation and trade regulation.

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free. The techno-demo project would require a total budget of ₱4 Million.

The commercial propagation of Bt cotton will be undertaken together with the promotion of the production of heirloom cotton and the implementation of organic cotton production technology. These developments will trigger the revival of the Philippine Cotton Industry.

Bt cotton is a transgenic crop designed to combat the cotton bollworm. This crop requires low level of pesticide spraying resulting to more environmental benefits. Bt cotton solves the problem on a major insect pest, at the same time increasing yields, and thereby delivering higher profits for farmers.

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