

13 September 2019

HONORABLE AQUILINO "KOKO" PIMENTEL III

Chairperson

Committee on Trade, Commerce and Entrepreneurship

Senate of the Philippines

Pasay City

Dear **Senator Pimentel**:

We are pleased to submit the Department's position on the following bills, entitled:

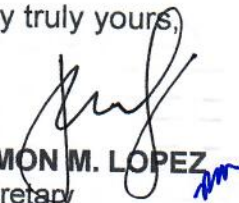
Senate Bill No. 524 "An Act Institutionalizing Bamboo Industry Development in the Philippines, Creating the Bamboo Industry Research and Development Center (BIRDC), Appropriating Funds Thereof, and for Other Purposes"

Senate Bill No. 337 "An Act Institutionalizing Bamboo Industry Development in the Philippines, Creating the Bamboo Industry Research and Development Center (BIRDC), Appropriating Funds Thereof, and for Other Purposes"

This is without prejudice to the Department's submission of additional inputs.

With my best regards.

Very truly yours,


RAMON M. LOPEZ
Secretary



OFFICE OF THE SECRETARY

DTI Position on

- Senate Bill No. 524 **“An Act Institutionalizing Bamboo Industry Development in the Philippines, Creating the Bamboo Industry Research and Development Center (BIRDC), Appropriating Funds Thereof, and for Other Purposes”**
- Senate Bill No. 337 **“An Act Institutionalizing Bamboo Industry Development in the Philippines, Creating the Bamboo Industry Research and Development Center (BIRDC), Appropriating Funds Thereof, and for Other Purposes”**

The Department supports the passage of the proposed measure that seeks to promote the development of the Philippine bamboo industry. The objectives of the bill are in line with DTI's thrust to revive the manufacturing sector, enabling it to serve as a seamless link between a productive agriculture and strong industry and services sectors. However, DTI defers to the position of the Department of Budget and Management (DBM) and other concerned offices on the matter of funding requirement.

Bamboo is one of the fastest growing plants in the world. On average, bamboo will reach its full height at 60 to 90 days and maturity at 5 years, depending on the usage. Its estimated lifecycle is 80 years with continuous annual harvest and does not require replanting after harvesting,

In 2018, the global market for bamboo products is at US\$2.05 B or 0.01% of the total world exports. Major products that were transported internationally included: a) engineered bamboo products (50.0%); b) woven bamboo products (17.3%); c) bamboo shoots (16.4%); d) bamboo furniture and seats (8.5%); and e) bamboo raw materials (4.4%).¹

At present, there are 62 documented bamboo species in the Philippines, 21 of which are endemic and 15 have the potential for commercial use.² Philippine exports of bamboo products grew by 7.3% from US\$513,289 in 2017 to US\$550,633 in 2018. These are primarily sold as vegetable products or used in making furniture, accessories, and woven baskets, among others.³

The following are some usage of bamboo in the country⁴:

- Bamboo is recognized as an ideal plant that can combat **climate change**. This plant stores up to 600 tonnes of carbon per hectare, produces oxygen and removes 3.5% more carbon dioxide in air compared to trees. Moreover, bamboos are usually planted near river banks and bodies of water which prevents soil erosion and reduces water accumulation. Also, it draws natural nitrogen from the soil, a natural alternative to chemical fertilizers.⁵
- Being a versatile plant, bamboo offers a wide variety of usage especially to indigenous people. This entails the creation of simple kitchen utensils, baskets

¹ United Nations (UN) International Trade Centre (ITC) Trademap

² C. Roxas "Bamboo Research in the Philippines" retrieved from https://www.biodiversityinternational.org/fileadmin/biodiversity/publications/Web_version/572/ch30.htm

³ Philippines Statistics Authority (PSA) as processed by Exports Marketing Bureau (EMB)

⁴ Philippine Bamboo Industry Roadmap, 2016

⁵ <https://theseanpost.com/article/fighting-climate-change-bamboo>

decorative articles and other handicrafts up to simple furniture like baby chairs and tables. Moreover, **handicrafts and furniture** with exquisite craftsmanship and handy-works are geared towards high class hotels and restaurants as well as for the international market.

- One of the biggest potential in bamboo is in **specialized products** such as barbecue sticks, toothpicks and chopsticks. These items are not classified under handicrafts since it is disposed after the initial usage.
- **Engineered bamboo** is produced by putting together two or more layers of slats, crushed bamboo, bamboo mats, flattened bamboo and/or veneered bamboo. This new material can be further processed into floor tiles, turned products (balusters), panels, furniture parts, handicrafts and posts or beams.
- Proper application of technology in turning bamboo into **charcoal** which can be used as alternative to wood charcoal to prohibit massive deforestation. This carbon can be used to produce **activated carbon** that can be applied as water purifier, deodorizer, air freshener and can increase soil alkalinity. Bamboo can also be used as **briquettes** for fueling generators, making it an alternative to fossil fuel.

Other potential usage and products derived from bamboo⁶:

- Bamboo is the main raw material for **pulp and paper** in India and other countries. The glaring advantage of bamboo, aside from having long fibers, is that there is no need for replanting since culms are harvested from a clump.
- **Bamboo chips** can be a potential source of energy, in the form of **bamboo chips**. To reduce the dependency on fossil fuel, some companies may use bamboo chips on boilers to generate steam to run power generator that produces electricity.
- Based on the funded project by the Department of Science and Technology - Philippine Council for Industries, Energy and Emerging Technologies Research and Development (DOST-PCIEERD) bamboo has been found to be a good source of cellulosic **nanocrystals** that can be incorporated to xylan and thermoplastic films, and can be used as protection from insect infestation (termites).

Following are the Department's initiatives to promote and develop the bamboo industry:

- 1) Implementation of the **Inclusive Innovation Industrial Strategy (i³S)** that aims at growing innovative and globally competitive manufacturing, agriculture, and services while strengthening their linkages into domestic and global value chains (GVCs).
- 2) Inclusion of Agriculture/Agribusiness as priority area of investment under the **2017 Investment Priorities Plan (IPP)** making projects involved in agricultural commercial production (i.e., production of seeds and seedlings, establishment of nurseries and hatcheries) and processing (e.g., facilities for drying, bulk handling, storage, harvesting, among others) eligible for investment incentives.
- 3) Provision of tools and machineries to micro, small and medium enterprises (MSMEs), through the **Shared Service Facilities (SSF)** project, to help increase their productivity and improve the quality of outputs.
- 4) Support and assistance in promoting bamboo and its allied industries through **business matching missions** and **trade fairs** organized locally or internationally.
- 5) Crafting and implementation of the **Philippine Bamboo Industry Development Roadmap** which plots the goals, objectives and strategies of the bamboo industry that will focus on: 1) addressing the industry gaps and constraints; 2) developments on the planting and processing of bamboo; and 3) engineering of bamboo as a more value-added commodity.

⁶ *Philippine Bamboo Industry Roadmap*

Hence, the Department reiterates its support to the enactment of the proposed law as it will institutionalize and establish appropriate mechanism to spur the bamboo industry's development and raise its competitiveness in the world market. In terms of the necessary funding, DTI defers to the position of DBM and other concerned agencies.

Kayaptrichay

Bureau of Trade & Industrial Policy Research

12 September 2019

Ref: BTIPR-092019-07

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