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Promoting Environmentally Preferable Products for Sustainable Development

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Environmentally preferable products (EPPs) are goods whose production and/or utilization have important environmental advantages over substitute products or the traditional products currently sold in the market. Hence, in the context of sustainable development, the promotion of EPPs is seen as a potential avenue for addressing environmental problems.

The purpose of this *Notes* is to summarize the findings of a recent research on EPPs in the Philippines. The objectives of this research were:

- to identify EPPs developed by government institutions;
- to identify problems related to their development; and
- to suggest recommendations that would address the problems and effect EPPs' full development in the country.

Summary of Environmentally Preferable Products

As of 1994, at least 37 EPPs have been developed by various government research institutions (see Tables 1.a, 1.b, and 1.c). These products are classified into five groups: agriculture-based, forestry-based, fishery-based, industry-based and other products according to input use.

The research and development of 31 of these EPPs were fully financed by local funds while those of the others were foreign-funded, either fully or partially. The technologies used in the development of 17 EPPs were originally developed in the country while those of

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Table 1.a
Summary of Characteristics of Environmentally Preferable Products in the Philippines
(as of 1994)

Product Classification	*FPRDI*	*FNRI*	*ITDI*	*BIOTECH*	*PCARRD*	*PCAMRD*	*NAAP*	*ATI*	*NTA*	*PTRI*	*PCA*	*Total*
Agriculture-based	3	4	5	2	1	0	1	1	3	1	0	21
Forestry-based	2	0	0	0	0	0	0	0	0	0	1	3
Fishery-based	0	2	1	0	0	0	0	0	0	0	0	3
Industry-based	1	0	0	5	0	0	0	0	0	0	0	6
Other products	0	0	3	0	0	1	0	0	0	0	0	4
Total	**6**	**6**	**9**	**7**	**1**	**1**	**1**	**1**	**3**	**1**	**1**	**37**

Notes:
FPRDI = Forest Products Research and Development Institute
FNRI = Food and Nutrition Research Institute
ITDI = Industrial Technology Development Institute
BIOTECH = National Institute of Biotechnology and Applied Microbiology
PCARRD = Philippine Council for Agriculture, Forestry and Natural Resources Research and Development
PCAMRD = Philippine Council for Aquatic and Marine Research and Development
NAAP = National Azolla Action Program
ATI = Agricultural Training Institute
NTA = National Tobacco Administration
PTRI = Philippine Textile Research Institute
PCA = Philippine Coconut Authority

20 others were based from other countries' refined technologies.

The products were also in various degrees of development. Some 11 EPPs were still being developed, five were already pilot-tested, four were ready for commercialization, 14 were already sold in local markets and only one was being exported.

The production of 23 EPPs was generally labor-intensive while that of six others was capital-intensive. The rest were both labor- and capital-intensive. The environmental advantages of these products may be drawn from these facts: 65 percent of these products use waste byproducts, 87 percent have nonpollutive processes, and all of the EPPs have nonpollutive utilization.

To summarize, the following can be said about EPPs in the Philippines:

- There is a number of EPPs which can be or are already produced in the country.
- Many of these products can be produced using locally available and labor-intensive technologies.

Problems in EPP Development

As much as it is desirable to develop EPPs fully, there are, however, major constraints to be addressed. In general, the problems depend on the research and development stages of these products.

Table 1.b
Summary of Characteristics of Environmentally Preferable Products in the Philippines

Product Classification	Source of Research Funding			Source of Original Technology		Stage of Development					
	Local	Foreign	Both	Local	Foreign	Product Development	Pilot Testing	To be Commercialized	Commercialized		
									Locally Sold	Exported	Not Known
Agriculture-based	17	3	1	11	10	8	2	3	5	1	3
Forestry-based	2	1	0	0	3	0	0	0	3	0	0
Fishery-based	3	0	0	3	0	2	1	0	0	0	0
Industry-based	6	0	0	1	5	0	1	1	4	0	0
Other products	3	0	1	2	2	1	1	0	2	0	0
Total	**31**	**4**	**2**	**17**	**20**	**11**	**5**	**4**	**14**	**1**	**3**

Table 1.c
Summary of Characteristics of Environmentally Preferable Products in the Philippines

Product Classification	Input Intensity				Environmental Qualities	
	Capital-Intensive	Labor-Intensive	Both	Waste User	Nonpollutive-Generating Production Process	Nonpollutive Consumption
Agriculture-based	4	13	4	17	17	21
Forestry-based	0	0	3	3	2	3
Fishery-based	0	3	0	1	3	3
Industry-based	2	4	0	1	6	6
Other products	0	3	1	2	4	4
Total	**6**	**23**	**8**	**24**	**32**	**37**

In the early development stage, the critical obstacle is inadequate funding support for EPP research. This problem is perceived as a result of the lack of government appreciation of the possible role that EPPs can play in environmental protection efforts of the country.

For EPPs that are ready for commercialization, a major problem is the lack of prospective investors. For capital-intensive EPPs, in particular, large investment outlays are needed and the necessary production tools, machines and equipment can only be purchased from other countries at prohibitive prices.

The major problem of EPPs which are already commercialized is weak market demand due to the lack of recognition by potential buyers. This problem is made worse by the

presence of market substitutes which are well-recognized by consumers. Still another problem for EPPs is their inability to break into the foreign market mainly due to the fact that EPP investors are neophytes in the business and have no previous experience in the export business.

Recommendations

Given the problems above, it is imperative that changes be made if the full potential of EPPs is to be realized. In this regard, the following actions are recommended:

❋ To address inadequate funding, apppropriate government agencies need to exert efforts in raising financial support for EPP research and development. For instance, if the government cannot directly provide additional funds, it should actively promote private sector investment or encourage the participation of international donor organizations in EPP resesarch and development.

❋ Lack of investors may be addressed through good product promotion among the busines sector. This involves convincing potential investors and consumers of the merits of EPPs as alternative products. The government must therefore look for effective ways to conduct said promotion. For instance, the responsible units either within the Department of Science and Technology or Department of Trade and Industry should be more active in "selling" these products.

❋ As to the problem of high-priced imported equipments, the government may consider the possibility of imposing lower tariffs on EPP equipments so that the domestic prices will decrease. Furthermore, the government can encourage the growth of local production of these equipments by providing certain incentives to producers.

❋ To strengthen the weak market for commercialized EPPs, intensive domestic product promotion must be exerted. Furthermore, a concerted effort between the government and the private sector is needed to develop export markets for these products. In particular, the government can encourage producers of EPPs by providing them with special privileges apart from the regular incentives offered to exporters while the private sector can provide potential EPP exporters with information on the nuances of the export business.

In conclusion, the study strongly argues that the national government should play a leading role in the development of EPPs in the country through the provision of tangible assistance, including financial support for research and promotion, and incentives to the emerging EPP subsector.

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