Office of the President
of the Philippines
Malacañang

MEMORANDUM

TO : HON. FILEMON A. URIARTE, JR.
Secretary of Science and Technology

HON. WILLIAM D. DAR
Presidential Adviser on Rural Development

Please be informed that the President has approved the proposed institutionalization of a national policy to use biotechnology as a strategy to improve agricultural productions, modernize Philippine agriculture and enhance rural development. Likewise approved is the recommendation of DOST that the Office of the President extend support to initiatives that will foster the development and application of biotechnology in the country.

RAMON B. CARDENAS
Senior Deputy Executive Secretary

21 January 2000

SBH/jm

DEPARTMENT OF SCIENCE AND TECHNOLOGY
OFFICE OF THE SECRETARY
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BY ____ DATE 1/25 TIME ____

DOST-2V160-13

(a)

Requesting for your inputs not later than 10 Dec. 99. Thanks

Office of the President
of the Philippines
Malacañang

IN REPLYING, PLEASE CITE
PJEE Record # R017982
R017982

OFFICE OF PRES. JOSEPH ESTRADA
DATE: 01 DEC 1999
RESPECTFULLY REFERRED TO:
APPROPRIATE ACTION.
RENATO M. SORIANO
Presidential Assistant

Provide feedback
the President

November 22, 1999

Ms. Dra (PCASTRD), Pls draft our comments on this memo. Thks. 8/12

URGENT PLEASE

MEMORANDUM

RECEIVED
DEC 09 1999
4282

FOR : **HIS EXCEL**
President

FROM : **SECRETARY W. DAR**
Presidential Adviser Rural Development

SUBJECT : **INSTITUTIONALIZATION OF A NATIONAL POLICY TO USE BIOTECHNOLOGY AS ONE STRATEGY TO INCREASE AGRICULTURAL PRODUCTIVITY AND ENHANCE RURAL DEVELOPMENT**

SOCIO-ECONOMIC RESEARCH DIVISION
RECEIVED
12/10/99
DATE
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CODE
PCARRD

This is to update His Excellency on the application of biotechnology in increasing agricultural productivity. A powerful research tool which uses living organisms or their parts to make or modify products and improve plants, animals, and microorganisms, biotechnology is used in breeding desirable plant varieties at a much shorter period than conventional breeding. It is also used to incorporate genes for the development of plant resistance to pests and diseases, abiotic stresses (e.g. drought and salt tolerance), and improvement of the nutritional quality of food crops by increasing their nutritional elements such as iron and protein. Thus, there can be more nutritious foods for the people who cannot afford to buy foods containing the necessary nutrients for human health. The judicious application of biotechnology in agriculture can therefore increase yield, improve product quality, reduce use of pesticides and other farm inputs, enhance the integrity of the environment, give value-added to products and services, and lower the exposure of farmers to hazardous pesticide residues. Philippine agriculture should adopt biotechnology as one of the

means to increase agricultural productivity to attain food security and rural development in the next five years.

Biotechnology includes the production of genetically modified organisms (GMOs) such as transgenic crops. In 1999, the global area planted to transgenic crops (soybean, corn, cotton, canola, potato, squash, and papaya) was 39.9M hectares, or an increase of 12.1% from 1998. Countries commercially producing transgenic crops are USA, Argentina, Canada, China, Australia, South Africa, Mexico, Spain, France, Portugal, Romania, and Ukraine. China has 53 GMOs that are being commercialized while India has allocated big public resources toward the development of infrastructure and human resources. Thailand which is conducting field trials of GMOs also uses biotechnology to improve traditional foods and fruits that have export potentials. It is already successful in improving its shrimp culture through biotechnology. In Kenya, biotechnology approaches reduced the cost of pest control by the rapid multiplication of banana plantlets and created new employment opportunities in towns and villages.

In Philippine agriculture, biotechnology tools have been used in generating technologies such as the mass propagation of planting materials (banana, abaca, orchids, other ornamentals and foliage, makapuno, etc.) through tissue culture or embryo rescue, more efficient breeding procedures through haploid or anther culture in rice and cell and protoplast culture; production of inoculants, biofertilizers, and biopesticides; biological control agents (i.e. Trichogramma, Diadegma etc.) including botanical pesticides; diagnostic kits against plant viral diseases; animal vaccines; feed additives; improved reproductive techniques in artificial insemination; growth hormones; production of enzymes; silage inoculants; in vitro genebanking; and genetic diversity studies using molecular markers. In addition, a critical mass of scientists are available and highly capable of conducting biotechnology R&D.

There are ongoing efforts to strengthen the country's capacity to undertake agricultural biotechnology R&D. For instance, the Rockefeller Foundation and the Japan International Cooperation Agency have collaborative projects with PhilRice to improve rice yield through genetic engineering (i.e. *Bt* rice, bacterial sheath blight-resistant rice by incorporating XA-21 gene; tungro virus-resistant rice). The DOST, PCARRD, and DA are financially supporting biotechnology R&D projects in corn, coconut, banana, papaya, and mango. The corn project is developing a transgenic corn resistant to Asiatic corn borer, stalk rot, and downy mildew. For coconut, its lauric acid content is being increased up to 60% using molecular strategies. The

banana project is developing a variety resistant to banana bunchy top virus (BBTV), a disease that is severely affecting this export crop. The papaya project which incorporates a gene that has a delay-ripening trait has produced putative plantlets that will be further evaluated. This crop is now being attacked by the papaya ring spot virus (PRSV) which wiped out the papaya industry in Southern Tagalog and has now spread to other regions in Luzon. Thus, another project is developing papaya varieties resistant to PRSV by inserting coat-protein PRSV gene. For the mango project, gene construction is underway.

Moreover, the Philippines has its own National Biosafety Committee which formulates guidelines in conducting activities related to GMOs and potentially harmful exotic species. The Philippine biosafety guidelines are considered one of the strictest in the world.

Biotechnology can be exploited to include other crops and other uses by giving it emphasis and importance in our programs on food security and rural development. It is a key to future breakthroughs in our agricultural research and can be instrumental in making our country competitive in the world market.

However, there is high public concern over the use of GMOs. Among the concerns are risks in the environment and to human health, impact on social and economic order, ethical challenges, roles of public and private sectors, and intellectual property management. There are ongoing consultations among the various stakeholders to inform them what biotechnology is all about and to clarify issues. Still, the lack of information on biotechnology pervades which contributes to confusion and apprehension. Therefore, there is a need for information dissemination through print and broadcast media, electronic communication (website), networking, and organization of fora, workshops and seminars.

Finally, we urge the institutionalization of a national policy to use biotechnology as a strategy to improve agricultural production, modernize Philippine agriculture and enhance rural development.

Our recommendation is based on the following:

(1) The afore-cited paragraphs were substantially agreed upon last May 29 by Secretaries Alabastro, Dayrit, Sarmiento, Deles and the undersigned, and by NEDA Deputy Director-General Llanto;

(2) The said paragraphs cover the broad areas of discussion last May 25 between the DA and civil society groups/NGOs such as SEARICE, Philippine Peasant Institute (PPI), Mother Earth, MASIPAG, Center for Alternative Development Initiatives (CADI), Green Peace, MODE, SIBAT, ANGOC, KAMMPIL, and the AVDF;

(3) In the May 25 meeting, the NGOs opposed the background information contained in a previously prepared DA draft paper and incorporated in the draft PMS policy statement, both of which cite the positive claims and advantages of GMOs; and,

(4) The Policy Statement should be (a) a general statement that is neither restrictive nor permissive; (b) neutral and objective so as to balance the interests and concerns of all stakeholders; and (c) instructive, so as to guide government agencies in their work.

Leonardo Q. Montemayor

LEONARDO Q. MONTEMAYOR
Secretary

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— "Fax 734 2105" Sec. Garchitorena

Republic of the Philippines
DEPARTMENT OF AGRICULTURE
Office of the Secretary
Elliptical Road, Diliman, Quezon City

OK
for transmittal to DA, DOST, DOH, DENR, DTI

18 June 2001

MEMORANDUM FOR THE PRESIDENT

FROM : **The Secretary of Agriculture**

CC : **Secretary Angelito Sarmiento, OPAAM**
Secretary Victoria P. Garchitorena, PMS

Subject : **Draft Policy Statement on Modern Biotechnology**

The Department of Agriculture proposes that the following Policy Statement on Modern Biotechnology be issued by the President:

Policy Statement on Modern Biotechnology

"We shall promote the safe and responsible use of modern biotechnology and its products as one of several means to achieve and sustain food security, equitable access to health services, sustainable and safe environment, and industry development.

"We shall ensure that all technologies that we promote, including modern biotechnology, will provide farmers and fisherfolks the opportunity to increase their over-all productivity and income; enhance the welfare of consumers; promote efficiency, competitiveness, and improved quality standards of local industries – all within the paramount objective of attaining safety and sustainable development, including its human, social and environmental aspects.

"The Departments of Agricultire, Science and Technology, Health, Environment and Natural Resources, Trade and Industry, and other concerned agencies are hereby directed to address the current issues associated with the local and global dimensions and trends of modern biotechnology, including its potential health, environmental and social impacts. Towards this end, they shall conduct public consultations with representatives from civil society, government and business; formulate departmental directives and regulations on the access to and use of the products of modern biotechnology; coordinate activities and programs on research, development and application; and allocate appropriate resources for the upgrading of capacities and capabilities to effectively regulate the technology and its products, including but not limited to product testing and labeling."

Adm 23 AGL-memo012401

Office of the President of the Philippines
Malacañang

Department of Agriculture
Diliman, Quezon City
RECORDS DIVISION
00157
JUL 19 2001

Time: 1pm
Received: DUDA

DEPT. OF AGRICULTURE
OFFICE OF SECRETARY
RECEIVED
JUL 19 2001
BY ......

MEMORANDUM

TO : ✓The Honorable
Secretary of Agriculture

The Honorable
The Secretary of Science and Technology

The Honorable
The Secretary of Health

The Honorable
The Secretary of Environment and Natural Resources

The Honorable
The Secretary of Trade and Industry

DATE : 16 July 2001

Please be informed that the President has approved the proposed Policy Statement on Modern Biotechnology as contained in the attached Memorandum dated 18 June 2001 of the Secretary of Agriculture, copy attached.

Accordingly, the President has instructed that the same be transmitted to you for your information, guidance and appropriate action.

ALBERTO G. ROMULO
Executive Secretary

EFM/100/elb
c/
Dcrro1737

CERTIFIED COPY:

AURORA T. AQUINO
Director IV
Malacañang Records Office
7/06/17/01