

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

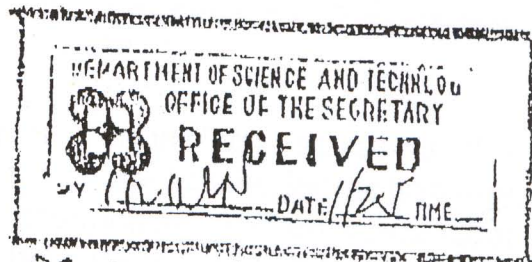
Please be informed that the President has approved the proposed institutionalization of a national policy to use biotechnology as a strategy to improve agricultural productions, modernize Philippine agriculture and enhance rural development. Likewise approved is the recommendation of DOST that the Office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

5/11/00

for
0001-003-19



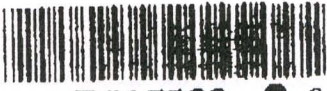
DOST-200160-13

(9)

*Requesting for your
minutes not later than
10 Dec. 99. Thank*

**Office of the President
of the Philippines
Malacañan**

IN REPLYING, PLEASE QUOTE
PIEE Record # R017982



November 22, 1999

MEMORANDUM

FOR :

**HIS EXCEL
President**

FROM :

**SECRETARY W. DAR
Presidential Adviser - Rural Development**

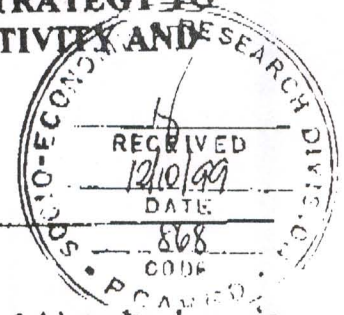
SUBJECT :

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

*A. I. I. (PLASTIC),
Pls draft over
comments on this
memo. This
8/12
URGENT PLEASE*

OFFICE OF PRES. JOSEPH ESTRADA
DATE: 1 DEC 1999
SPECTFULLY REFERRED TO:
APPROPRIATE ACTION:
RENATO M. SORIANO Deputy Assistant

*Provide feedback
to the President*



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.

DEPARTMENT OF SCIENCE AND TECHNOLOGY
OFFICE OF THE SECRETARY
RECEIVED
DATE 12/15/03 TIME 11:14 AM

Our recommendation is based on the following:

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

Adm 23 AGR. Memorandum
Office of the President
of the Philippines
Malacañang

Department of Agriculture
Palace, Quezon City
RECORDS DIVISION
00138
JUL 19 2001

Time: pm
Received: DUWA

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

DEPT. OF AGRICULTURE
OFFICE OF SECRETARY
RECORDS DIVISION
JUL 19 2001
BY AV

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
ALBERTO G. ROMULO
Executive Secretary

EPN/100/eltb
ep
Dec 17 2001

CERTIFIED COPY:
Aurora T. Aquino
AURORA T. AQUINO
Director IV
Malacañang Records Office
8671701