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R&D program readies Muslim Mindanao for global market

This is the right time to harness Muslim Mindanao's vast agriculture and fishery potentials, making it ready to compete in the global market.

This is the emphasis of Bureau of Agricultural Research (BAR) Director Eliseo R. Ponce's message when he presented the R&D Program's major initiatives and conceptual framework during the formal launching of the program at the Southern Philippines Development Authority (SPDA) Training Center, Zamboanga City, 26 March 2001.

The program is part of the government's initiatives to make Mindanao the food basket of the Philippines and to counter the misallocation of R&D investment in the last few decades. Specifically, the program has three major components: saving biodiversity, strengthening the R&D capacity through infrastructure and human resource development, and development of community-based pilot projects. The strategic areas covered by the program are Regions 9, 12, and ARMM.

To save biodiversity, the program will maintain a collection of economically important fruit trees and plants in Sulu and Maguindanao, and conserve endemic fishery resources in Lake Lanao. This is a major consideration of the program since Mindanao is the primary source of many agri-based products such as tuna, corn, banana, seaweeds, and pineapple, which have established production and marketing tie-ups with large local and foreign agribusiness corporations.

To fully operationalize the program's major components, infrastructure development will be done. The BAR through its Institutional Development Grant (IDG), has initiated institutional development activities such as the construction of the BPI-PhilRice R&E Center and Model Socio-Economic Enhancement Development (SEED) Farm; development of the 385-hectare Maridagao Experiment Station; Sulu-Tawi-Tawi Germplasm Collection and Maintenance Center; and improvement of the ARMM-Integrated Agricultural Research Center research facilities. Likewise, the program also targets the development of community-based pilot projects through the application of new technologies in pilot municipalities to increase farm productivity and profitability.

As a joint undertaking, BAR and BPI will develop the existing Model SEED Farms in the identified pilot provinces through the transfer of technologies on establishment of vegetable gardens, fruit trees (orchards), nursery management, and integrated pest management to promote livelihood.

As part of the strategies of implementation, BAR created a Project Formulation Team (PFT) that will be responsible for identifying specific projects that focus on resource conservation and germplasm collection.

A Memorandum of Understanding (MOU) was signed between the DA Secretary Leonardo Q. Montemayor and DA-ARMM Secretary Thambeyapa Manjoorsa detailing the DA's role and responsibilities in the operationalization of this project. *(Mary Charlotte O. Fresco)*

R&D ManCom tackles major concerns; DA structure reviewed

The R&D Management Committee (RDMC), in its third meeting, reviewed the DA organizational structure and proposed one that integrates the DA agencies/institutions along key functions. This would also delineate the interrelationship of agencies within a functional unit.

Attended by R&D heads from the DA staff bureaus and attached agencies with BAR Director Eliseo R. Ponce as chair, the RDMC first reviewed Special Order (S.O.) 123, series of 2001 which mandates the new DA organizational structure.

The RDMC believes that the SO cannot possibly supersede Executive Order (E.O.) 338 issued this year which created the existing DA organizational structure. Moreover, R&D, which is very important in agricultural modernization is not given the appropriate delineation in relation to the other key functions of the Department.

Moreover, R&D, which is very important in agricultural modernization, is not given the appropriate delineation in relation to the other key functions of the Department. In line with this, the RDMC proposes a DA Organizational Structure that integrates the different DA agencies/institutions along the key functions, and

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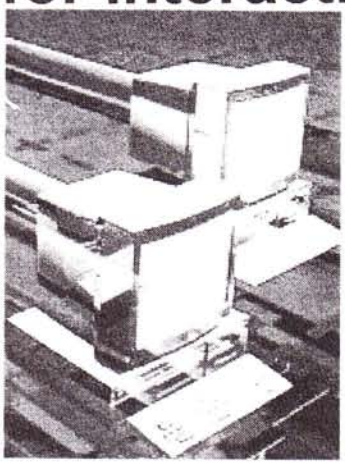
BAR takes info tech challenge for interactive R&D community



□ *by Laarni C. Anenias*

"Information technology (IT) is the key to finding the country's niche in the new economy of the 21st century," President Gloria Macapagal-Arroyo stated in a recent gathering. In agriculture, modernization takes on a fast pace through IT. The Agriculture and Fisheries Modernization Act, created in 1997, paved the way for a focused and rational delivery of agricultural information by providing resources in setting up a national R&D information network.

At the Bureau of Agricultural Research (BAR), a similar endeavor on IT advancement is in the middle of implementation: the Agriculture and Fisheries Research and Development Information System (AFRDIS).

By the end of March 2001, through the leadership of BAR's Information and Communication Technology Division (ICTD), AFRDIS has completed a series of site visits of the various partner-institutions. The ICTD technical group, composed of Messrs. Winston Tabada, Raymundo Gonzaga, Billy Belonio, and Jun Oliva, reviewed the technical specifications of the IT facilities of the Northern and Central Luzon, Visayas, and Mindanao clusters.

Background

AFRDIS aims to provide an interactive and proactive information exchange among the participating institutions. One of the major tasks of AFRDIS is to establish a local area network (LAN) in each partner-institution. These institutions will then be interconnected through a wide area network. This is to facilitate the efficient R&D information exchange among them. Initially, the information network is composed of the following clusters:

- Northern Luzon: Mariano Marcos State University (MMSU) and Ilocos Integrated Agricultural Research Center
- Central Luzon: Philippine Rice Research Institute, Bureau of Postharvest Research and Extension, and Central Luzon State University (CLSU)
- Visayas: Eastern Visayas Integrated Agricultural Research Center, Visayas State College of Agriculture, and Central Visayas Integrated Agricultural Research Center
- Mindanao: University of Southern Mindanao and Central Mindanao Integrated Agricultural Research Center After AFRDIS' formal launching in September last year, a series of workshops and trainings were held to prepare the partner-institutions in the establishment and maintenance of an information system in their respective institutions.

After several meetings, it was observed that the partner-institutions composed a heterogeneous group in terms of IT capability and resources. While some institutions have state-of-the-art IT facilities and expertise, others still lack training and resources on IT. Some institutions have a LAN in place, while others have stand-alone computers.

Changes in the specifications of IT equipment

For those institutions that still have to establish their respective LANs, the ICTD group changed the specifications of their IT equipment, mainly for economical reasons. These institutions are the regional integrated research centers, MMSU, and PCC.

One of the major specifications changed was the server. Since the ICT counterpart teams predicted low information traffic in the next two years, it is not cost-efficient to operate with a high-end server. Thus, the technical group downgraded the server specifications.

The group likewise specified a less expensive switch, hub, and router – all vital components of a LAN – for the above-mentioned institutions.

Cluster connectivity

As agreed with the ICT counterparts, CLSU will remain as the nodal center for Central Luzon. The University was chosen for its strategic location, available personnel,

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delineates the interrelationship of agencies within a functional unit.

The structure also provides the opportunity to correct the errors of EO 338 by improving the delivery of extension support services by converting the Agricultural Training Institute (ATI) to the Bureau of Agricultural Extension (BAEx) and harmonizing quarantine and inspection activities of the Bureau of Plant Industry (BPI) and the Bureau of Animal Industry (BAI) through the establishment of the Bureau of Quarantine and Inspection.

Atty. James Dennis Gumpal, BAR legal expert, was invited to present the legal mandate of R&D in the DA.

He presented the historical perspective on how R&D was systematized over the years through numerous legislative proceedings and policy recasting, and how all these led to the creation of BAR. Part of the presentation touched on the existence of PCARRD and its conversion into the Philippine Council for Agriculture, Forestry, and Natural Resources Research and Development (PCAFNRRD).

Philippine Coconut Authority (PCA) Deputy Administrator Carlos C. Carpio presented the proposal on the establishment of the Philippine Coconut R&D Institute (PhilCORDI). Later, the Committee agreed on renaming it into the Philippine Coconut and Tropical Oils Research and Development Institute (PhilCoconut). The Institute shall serve as an autonomous unit under PCA, giving it more flexibility in its operation. This is consonant with the provision in the AFMA towards promoting excellence among R&D institutions through the exercise of autonomy and academic freedom.

Another issue tackled is the promotion of Farmers' Produce in all DA activities/functions. The Committee strongly believes that in order to provide a sustainable market for our local farmers, the DA should take the lead in promoting locally-produced farmer products by serving locally-produced farmer products during DA activities/functions.

Another major concern brought up during the meeting was on R&D funding. Allocation for the agency R&D core budget is inadequate

See R&D ManCom, page 3

Biocon-based IPM: Better control against ACB

□ by ***Junelyn S. dela Rosa***

Biological control has gained momentum in most developed countries as early as the 70's but it has not gained much ground here in the Philippines. Moving to inject fresh interest into this environment-friendly technology, scientists and other mainstays of the Corn RDE Network conducted a seminar on Biocon-based IPM to encourage their partners to verify and extend the technology to their own fields.

Twenty staff from the different Regional Crop Protection Centers (RCPC) and Local Government Units (LGUs) in the country attended a Field Day that launched Biological Control-based Integrated Pest Management (IPM) against Asian Corn Borer (ACB) at the National Crop Protection Center (NCPC) of the University of the Philippines Los Baños, College of Agriculture (UPLB-CA) on 4 April 2001.

The study used four biocontrol agents; namely: Earwigs (Euborellia annulata), Orius (Orius tantillus), Trichogramma and some larval-pupal parasitoids against Asian Corn Borer (Ostrinea furnacalis) This is a destructive pest that causes 20-30 percent yield loss as experienced by corn farmers every year.

The Asian Corn Borer (ACB) is dreaded by all corn farmers since it attacks corn in the early part of the mid whorl stage, directly affecting corn ear quality. Young ACB larvae begin feeding on the leaf around the egg mass and later within the whorl while older larvae bore into the stalk behind the leaf sheath. The new technology is the output of a high-impact project of the National Corn RDE Network lead by Dr. Belen Morallo- Rejesus, a professor of the Department of Entomology, UPLB-CA. Entitled: Development of Biological Control-Based IPM for Asian Corn Borer, it is divided into four components: 1) Rearing and Field Augmentation of the Earwig Against ACB, 2) Mass Colonization and Evaluation of Orius Against ACB, 3) Conservation Methods for the Natural Enemies of ACB and 4) Search for Larval-Pupal Parasitoids Against ACB on Super Sweet Corn. The other researchers of the study were Dr. Pio A. Javier (NCPC, CA-UPLB), Ms. Marcela Navasero (Department of Plant Pathology, CA-UPLB), and Dr. Gloria Camarao (UP Mindanao-CA).

Dr. Rejesus emphasized the potential of earwigs as a biological control agent against ACB. She cited laboratory studies which show that earwigs are voracious corn-borer eating insects, preying on egg masses, early instars, larvae and pupae of ACB. "Their sustainability on the field would not be hard to maintain since earwigs can disperse in the fields 3-6 meters away from its release point", she further stressed. Dr. Rejesus has mass reared earwigs in the Department of Entomology, UPLB, using the combination of dogfood and corncob as the factitious diet.

Experimental plots which used the biocontrol agents against ACB showed healthy and undamaged corn ears even without spraying the usual chemicals. This has fueled the optimism and decision of the researchers to launch the technology even if the experiments are still going on. They believe that the Biocon alternative is not only friendly to the environment, cost-effective and sustainable, it also poses no health risks to farmers.

Dr. Javier also asserted that conservation of other natural enemies in the cornfield and augmenting their population is imperative to control ACB and other pests and diseases of corn. Dr. Javier applied "staggered planting" as another alternative to pest control.

This one-day activity was organized by the National Corn RDE Network and the National Crop Protection RDE Network, in cooperation with the National Livestock and Poultry RDE Network and the National Crop Protection Center (NCPC) and the Department of Entomology of the UPLB-CA with funding support from DA-BAR.

In a message to the participants, Dr. Wilfredo David, Chancellor of the UPLB lauded the new technology by saying that the study is "a big leap towards the use of new biological agents" in minimizing if not eliminating crop losses due to pests. Participants visited the Central Experiment Station, Pili Drive, Biocon Rearing Laboratories and at the Entomology Department and NCPC to observe how the biocon agents are reared and multiplied in the laboratories. The participants toured the test plots and the laboratories where the four biocontrol agents were studied and mass reared.

In the afternoon, the participants from the different RCPCs (Region 3, 4, 5, 10, ARMM, CAR and Cebu) prepared their respective action plan on how to pilot the technology effectively in their regions. When the participants were asked about their impression of the promising technology, they said that they are " excited and eager to bring the new technology to the farmers in the different regions". The researchers promised to conduct a follow-up hands-on seminar or training for the RCPC and LGU staff and other extensionists on the mass rearing of the biocontrol agents ■

Guidelines...

institution's proposal should also detail institutional capability to handle a project (strength and weaknesses), the focus of needed institutional enhancement or the institutional R&D thrusts being addressed, and desired status to be achieved.

These factors were not included in the previous format but were found relevant in evaluating the institutional development needs.

The IDP proposals were submitted to BAR for evaluation by the BAR-IDD Regional External Review Team (RERT) as basis for providing Institutional Development Grant (IDG), a support program initiated by the Bureau to develop critical human resource, laboratories, and experimental stations. *(Mary Charlotte O. Fresco)*

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compromising the performance of the different R&D agencies in the conduct of R&D activities.

The Committee believes that there is a need to revise the budget structure of agencies to conform to AFMA. Likewise, the core budget of agencies must be increased to enable them to perform their core function under normal conditions by reallocating MakaMASA funds for this purpose. *(Joell H. Lales)*

Web NEWS

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Study points to 'Mad Cow' blood risk for humans
http://www.dailynews.yahoo.com

Human fat may provide useful cells
http://www.dailynews.yahoo.com

Biotech CEO says map missed much of genome
http://www.dailynews.yahoo.com

Guidelines for IDP proposal revised

The Bureau of Agricultural Research (BAR) recently revised and refined the existing Institutional Development Program (IDP) proposal format. The format serves as guideline for the members of the National Research and Development System for Agriculture and Fisheries (NaRDSAF) in preparing their institutional program proposal for submission to the Bureau and as basis for awarding institutional development support.

The move was anchored on one of the Bureau's major strategies to ensure scientific excellence, quality and relevance of R&D programs in the whole R&D community.

The proposal format covers project title, project proponents, total project cost, duration of project implementation, source(s) of fund, project description, and its corresponding details (rationale, objectives, expected outputs, project components, improvement of facilities, equipment needs etc.).

Major revisions and inclusion of some criteria have been made in the project description part to reflect the adherence of the institution's program to the mandated/assigned R&D program by the national and regional commodity RDE networks. This is to avoid duplication of R&D activities and to save resources. Likewise, it was also found significant to present the roles and functions of the regional institutions to the overall R&D system in the country. It should highlight the catalytic/pivotal role of the institution in servicing other regional and national institutions or what they also refer to as "spill over effect", as well as its role in knowledge generation and strengthening capacity of the R&D system.

Subsequently, the

See Guidelines, page 3

DA R&D agencies dialogue with DBM; Proposed change in the GAA line budget

The Department of Agriculture (DA) Research and Development (R&D) agencies, including the Bureau of Agricultural Research (BAR) recently held a Budget Dialogue with the Department of Budget Management (DBM) at the CERDAF Conference Room to discuss the new structure of the R&D budget for CY 2002.

Highlight of the dialogue was a proposal to change the format of the General Appropriations Act (GAA) line budget of the different R&D units. Instead of presenting the budget according to the GAA, the DA R&D units proposed to present the budget according to their specific core programs. Hence, the core function will have a corresponding fixed budget or core budget. On the other hand, the R&D budget, which is a variable cost, will depend on the annual program of a particular unit. The proposal of the R&D group to change the format will be considered for the Key Budgetary Inclusions (KBIs) for CY 2003, since DBM believes there is no sufficient time for the proposal to be included for 2002.

Among those who presented their annual operating budget (core funds) and R&D budget (grant funds) during the dialogue were representatives from the Fiber Industry Development Authority (FIDA), Cotton Development Administration (CODA), Agricultural Training Institute (ATI), Philippine Coconut Authority (PCA), Sugar Regulatory Administration (SRA), Philippine Carabao Center (PCC), National Tobacco Administration (NTA), Bureau of Soils and Water Management (BSWM), Bureau of Plant Industry (BPI), Bureau of Animal Industry (BAI), Bureau of Postharvest, Research and Extension (BPRE), and Bureau of Fisheries and Aquatic Resources (BFAR). *(Rita T. dela Cruz)*

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and ability to generate income. However, due to geographical distances and barriers, more feasible ways on connecting the Northern Luzon and Visayas clusters remain to be explored.

Challenges ahead

Barely a year after its implementation, AFRDIS still has a lot to accomplish in its five-year implementation period. Hopefully, purchase and installation of appropriate IT equipment will ensue after this reassessment.

Sources: Reports from BAR-ICTD
Harnessing Information for Development -- A Proposal for a World Bank Group Strategy (http://www.worldbank.org/html/fpd/harnessing/hid1.html)
The President's IT Message (http://www.i-philippines.ph/THE_PRESIDENT_S_US_TRIP/the_president_s_us_trip.html

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GM food crops safe; scientific community clarifies issues

Farmers looking at experimental BT corn

Genetically modified (GM) food crops are as safe as any conventionally bred crop and pose no additional threat to the humans and the environment.

This is one of the clarifying statements issued by the members of the Philippine scientific community. They echoed the declaration of the Food and Agriculture Organization (FAO), European Commission, The Third World Academy of Sciences and the national academies of science and technology of several countries regarding GM crops.

Further, the scientists cited the Pontifical Academy for Life of the Vatican approving biotechnology and the use of genetically modified organisms (GMOs) as long as they help prevent hunger. They said that more sectors of society, including small farmers, benefit more from the technology than big commercial farmers. With GMOs, the farmers and the environment are less exposed to harmful effects of pesticides since the crops are resistant to insect pests.

GMOs are new varieties of plants or strains of animals or organisms. They are developed by adding, through laboratory means, a useful quality or desired characteristic to a popular variety or strain. This is a technology that can be used to increase productivity and improve the quality of crops like rice, corn, among others. The developed countries have been using this technology for sometime. In the U.S., for instance, 70 percent of their processed foods already contains GMO-derived ingredients.

The area planted to crops using GMOs is increasing. In the year 2000, the total world area is 44.2 million hectares representing an increase of 11 percent from 1999. China planted on more than 500,000 hectares and Indonesia, 10,000 hectares. Available soybean and corn at the world market contain 50 and 16 percent GMO, respectively. The Philippines is one of the countries that annually imports these commodities. This means that our country has been using GM food crops for sometime.

The scientists clarified other issues. Among them is the GMO contamination in foods. It is not true, they said, that the presence of GMOs in food has an adverse effect on health. What happened in the U.S. as publicized regarding the recall of a certain corn was simply a scare tactic.

Another issue is on the pollution in food production such as the proposed field trial in

See GM food, page 5

Asian Agriculture Congress

Philippine & Asian aggie faces new challenges

The attainment of food security without threatening our natural resources remains a formidable challenge and struggle for all Filipinos and other Asians today.

This was the main point of Department of Agriculture (DA) Secretary Leonardo Q. Montemayor in his speech during the inaugural ceremony of the First Asian Agriculture Congress with the theme "Food Security and Environment Protection" held at the Westin Philippine Plaza, 24-27 April 2001. Lindsay Falvey, dean, College of Agriculture, University of Melbourne, Australia likewise, stressed that food security is the ultimate means of attaining economic growth and recovery. Food security, in his definition, is the capacity to access adequate, affordable and nutritious food for all the members of the family at all time. He pointed out that food insecurity is largely affected by the rapid increase in the

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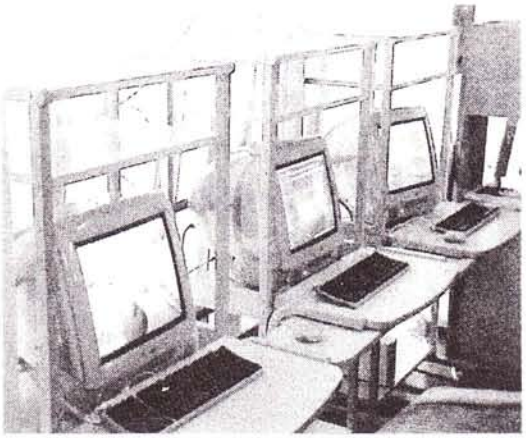
BAR takes faster route to info highway



What other method of retrieving information can be faster and more cost-effective than the internet? Nowadays, almost everything and anything under the sun can be found in the net. Lately, the Bureau of Agricultural Research (BAR) took a yet faster route to the information highway through wireless broadband technology.

Moving away from dial-up access, a means of internet connection that uses telephone lines to transfer data, BAR has been subscribing to the wireless technology for more than a month now.

Broadband wireless is the latest in telecommunications technology. With a high capacity for transferring large amounts of data, this technology is instrumental in meeting BAR's growing demand for information access through the internet.

Employees in management and research positions were given access to internet accounts connected to wireless broadband. Broadband wireless uses microwave frequencies to transmit data at rates higher than 56 kbps. Here at BAR, data transfer rate is guaranteed at 64 kbps, an even faster Internet access.

Many institutions around the globe are gradually shifting to wireless technology. "Fast, efficient, and affordable, it is the latest high-speed 'on-ramp' to the information super-highway," according to Alcatel, one of the world's leaders in telecommunications.

Information technology experts say "installing wireless equipment is much less expensive and easier than laying land lines."

Broadband Philippines, one of the technology's providers in the country, affirms that wireless technology is future-proof, meaning, it can be integrated with old and new systems or applications.

With this new IT advancement in the Bureau, BAR increases its capacity in serving as the primary orchestrator of agricultural and fisheries research in the country. *(Laarni C. Anenias)*

Sources:
Broadband Wireless -- The Next DSL (www.cid.alcatel.com/frames/builder.html)
Reports from Information and Communication Technology Division
Tuning in to wireless broadband (www.zdnet.com)
Wireless technology overview (www.broadbandphilippines.com)

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world's population as evident today and in the next decades. He emphasized that, for a country to attain food security, it should increase the volume of grains (staple food) for domestic and international market, minimize agriculturally induced degradation, protect the enviromnent, human and ecosystem rights to promote self-sufficient agriculture.

Highlighting the affair were plenary sessions on four major themes: Food Security Challenges; Environment Management and Biodiversity; Private-Public Sector Partnership; and Future Technology. In the first plenary session, studies on enhancing crop productivity and sustainability were presented.

The second plenary session focused on studies on enhancing animal production systems in Asia and balancing crop and animal productivity and environment. The third plenary session showcased studies on biotechnology for food security and environment protection while the last session was devoted to studies on public-private sector partnerships, and information technology for food security and environment protection.

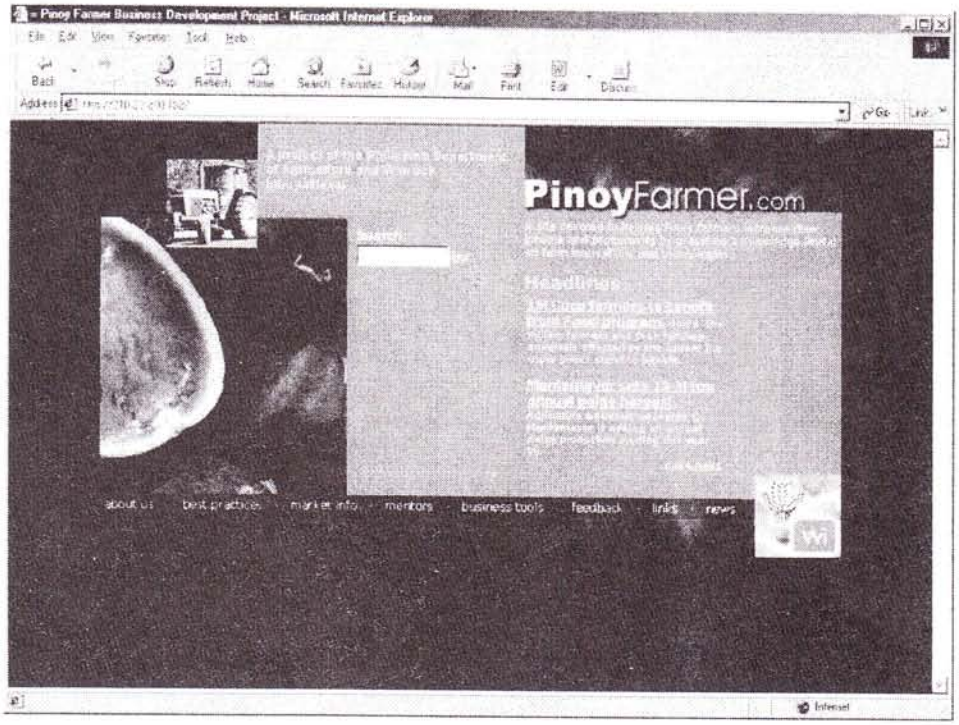
The researches presented in the sessions were conducted by the world's prime research institutions and universities. About 300 participants, majority of whom are experts and scientists in the field of agriculture, particularly in rice and livestock production, gathered for this affair.

The affair was a venue to disseminate technological advances in agriculture and share solutions to common crop and animal production constraints.

The other luminaries present during the Congress include Dr. Gurdev Khush, president of the Society for the Advancement of Breeding Researches in Asia and Oceania (SABRAO), and Dr. Leocadio S. Sebastian, chairman of the Federation of Crop Science Societies of the Philippines (FCSSP) and director of the Philippine Rice Research Institute (PhilRice).

The Congress was a joint collaboration of the Asian Crop Science Association (ACSA), SABRAO, and FCSSP. Its major sponsors and host agencies include the DA, DA-Bureau of Agricultural Research (BAR), UP Los Banos (UPLB), International Rice Research Institute (IRRI), International Services for the Acquisition of Agri-biotechnology Applications (ISAAA), Food and Agriculture Organization (FAO), Rockefeller Foundation, and Monsanto Philippines, Inc. *(Mary Charlotte O. Fresco)*

DA, Winrock to launch Pinoy Farmer website



Proponents of the Pinoy Farmer Business Development project met recently to finalize the design and content of the project's web site, which is set for launching third week of May. The web site or Knowledge Portal is one of five components of the Pinoy Farmer project set to be implemented to benefit traders, extension workers and farmers, and provide them with an enhanced extension service delivery system. Present were Winrock Country Director Bong Bolo, BAR IT Specialist Ray Gonzaga, Regional Programs Division Chief Resty David, and other BAR staff.

According to Mr. Bolo, the Knowledge Portal will serve as a main source of relevant information for planning, marketing linkage and technology access. It will contain the latest data on technologies developed by agriculture and fisheries R&D systems here and abroad.

Specifically, the Portal will feature farm innovations on: best practice; business planning tools; market linkage/information; mentor network; and agro-climatic data. These features were carefully selected based on the information needs assessment of farmers and extension workers, and an inventory of the existing Department of Agriculture (DA) information resource.

The best practices section will provide ready information on production, post-harvest handling, and packaging concerns. "Result of R&D researches on commodities with good market potential and high profit will be organized into packages of practices and translated into simple, easy to understand formats. Location and market specific packages of best practices, and new technologies developed in other countries with good potential application under Philippine condition will also be included."

To assist farmers in making sound business decisions, the business tools will feature various templates like feasibility studies and other on-line decision-making aids.

The viewers can find tips on how to make their enterprises more profitable, and on comparative advantage data of commodities with long gestation periods vis-a-vis other countries.

The market information section will allow viewers to compare and note prices of commodities in different regions in the country. Other information contained in this section will include a detailed profile of buyers, producers, and input suppliers, requirement and product specifications, and contracting arrangements.

A pool of national and international experts will also be available via the mentor network to answer queries from the site's viewers. Query results, professional advice, and other data will likewise be incorporated in the information package.

Aside from these features, the Portal will also provide links to other agriculture agencies and centers.

The Pinoy Farmer Business Development program is a joint project of the DA-Bureau of Agricultural Research and Winrock International. It aims to revitalize the country's agricultural extension service by delivering integrated, market-driven support services of DA agencies and the private sector to local government units and rural-based organizations.

Aside from the Knowledge Portal, the project will also provide services on training, integrated information and communication system, participatory R&D on farm innovations, and marketing support. *(Thea Kristina M. Pabuayon)*

Success indicators for GSDP corn research modified

To further improve the implementation strategies of the Grains Sector Development Program (GSDP) Corn Research, proponents recommended certain revisions in the existing logical framework (log frame) of the project. This was discussed during the meeting held on 17 April 2001 at the Project Management Office (PMO) stationed at the 4th floor of the Department of Agriculture (DA) building. The event was participated in by representatives from the GSDP implementing units - Agricultural Training Institute (ATI), Philippine Rice Research Institute (PhilRice), Bureau of Agriculture Research (B AR), Bureau of Soils and water Management (BSWM), and the PMO.

Specifically, the revisions focused on modifying the success indicators of the project's expected outputs.

Primarily, GSDP is aimed at increasing the income of grain-dependent rural communities. BAR will spearhead the implementation of the Corn Research component. Granting that no significant deviation in weather occurs, and on-time government funding is given to the centers, the project is expected to post a greater than 1.34 (>1.34) ratio of the output value to the production cost for corn in five years time.

For improving grains productivity through an efficient technology-based approach, four success indicators will be used to track the project's performance. These indicators are : 15,000 tons increase in corn production and an average net income increase of P3,300 per hectare for corn farmers. These are all expected to happen at the 5th year of the project implementation. Likewise, these indicators are targeted with the assumptions that infrastructure support will be completed on time, that the fluctuation of grains prices will be at a manageable level, and that cooperatives remain stable, among others.

As an output of the GSDP, improved rice and corn varieties, new technologies, modern facilities, and improved policy and monitoring capability of the DA top the list. Specifically for the Corn Research, four hybrid technologies that will improve corn yields will be developed by the year 2005. These technologies are expected to increase corn yields by 750 kg/hectare. Aside from the targeted accomplishments, proponents will work extensively for the farmers to adopt and plant these corn hybrids to 20, 000 hectares by year 5.

The PMO is set to validate the modified log frame for approval.

The corn component of GSDP is a five-year, P549 million-peso project of the DA. It will be implemented in six major corn producing areas in the country: Regions II, V, VII, X, XII, and ARMM. State universities like the University of Southern Mindanao (USM) and UP Los Baños will also be part of the project implementation. Recent developments include a scheduled planning workshop for the establishment of the Philippine Corn Research Center (PhilCorn) at USM and the release of A.O No. 5, which provides for the establishment of PhilCorn. *(Thea Kristina M. Pabuayon)*

BAR director attends CGIAR-SG final meeting

BAR Director Eliseo R. Ponce represented the Philippines to the final meeting of the Steering Group (SG) of the Consultative Group on International Agricultural Research (CGIAR) Change Management at the World Bank Headquarters in Washington, DC., 10-11 April 2001.

This is the last in a series of meetings held to discuss and formulate proposed changes that could revitalize the whole CGIAR system. The plan to revitalize the CGIAR was first proposed during the International Centers Week (ICW 2000). Dr. Margaret Catley-Carlson, chair of the Change Design and Management Team (CDMT) presented the revised CDMT Interim Paper that incorporated the comments and recommendations given by the Steering Group during the CDMT-SG joint retreat in the Hague, Netherlands last 6-7 February 2001.

Dr. Carlson expounded on the seven recommendations, which encapsulate the dynamics to revitalize the whole system and ultimately increase its potential of perceived relevance and attract new donor support. Specifically, the recommendations were formulated to bring about a more effective approach to global problems, a more effective structure, and more effective decision-making. These are: 1) Global Challenge Programs, 2) Enhancing the Science Output, 3) Longer-Term Finance, 4) Centers Common Office, 5) Restructuring Issues: Mergers and Clusters, 6) Governance Functions and Structures, and 7) Decision Making Processes.

As a start, the CDMT recommended that the CGIAR should formulate and implement one or two Global Challenge Programs (GCPs) in addition to its current research agenda. GCPs can be regional or sub-regional in focus. While the challenge of GCPs---drought, increasing capacity, better water use, and poverty alleviation should be global, the application may well be very local. The CDMT suggested that the CGIAR adopt a target to have over half of its research agenda delivered through a few GCPs by 2005.

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DA 2002-04 budget, up for approval

The Department of Agriculture Management Committee (DA-ManCom) convened all the heads and executive directors of DA staff bureaus, attached agencies, regional offices and executive directors of the Agrikulturang MakaMASA programs for a preparatory conference at the ITCAF Conference Hall. The two-day event called for a presentation of each agency's/program directorate's priority thrusts and major programs, projects, and activities for the approval of their 2002-2004 budget.

In attendance were a total of 47 presenters, representing their respective agency/bureaus/regional office/MakaMASA program. There were 20 representatives from DA attached agencies, 7 from staff bureaus, 15 from regional offices, and 5 from MakaMASA programs. Each was given a five-minute presentation.

DA Secretary Leonardo Montemayor served as the keynote speaker for the event. Other attendees included Undersecretary for Finance/Administrative and Resource Mobilization Jocelyn Bolante who provided the welcoming remarks; Undersecreatry for Policy, Planning nd Research Arsenio Balican who provided the overview, and a representative from the Development Academy of the Philippines (DAP) who provided the meeting presentation. On the other hand, the Bureau of Agricultural Research (BAR), represented by Dir. Eliseo R. Ponce expounded on the DA R&D agencies' proposl to change the format of the General Appropriations Act (GAA) line budget.

Dr. Ponce emphasized that, instead of presenting the budget according to the GAA, it would be better, and perhaps more convenient if the agencies present their budget according to their specific core programs. This way, the core function will have a corresponding fixed budget or core budget.

DA ManCom scheduled the next briefing on 2 May 2001 whereby all agencies/bureaus will be presenting their 2002-2004 budget for approval. *(Rita T. dela Cruz)*

BAR officials'...

focused on Funds Accountability, Management of Government Funds, Funding of R&D Programs and Projects; and Financial Management Information System.

Resource speakers from the Civil Service Commission (CSC), Commission on Audit (COA), DA Central Office (DA-CO), Records Management and Archives Office (RMAO), National Intelligence and Coordinating Agency (NICA), and BAR-ICTD substantiated the BAR Admin and Finance Manual by providing information on appropriate laws, executive orders, memorandum circulars, admin orders, and special orders.

The participants were given understanding and appreciation of financial management and monitoring of the utilization of funds intended for R&D activities.

A second training seminar will also be held for BAR division and section heads, while a third seminar will be held for the National RDE Networks and other National Research and Development System for Agriculture and Fisheries (NaRDSAF) members. *(Cecilia J. Baquireza)*

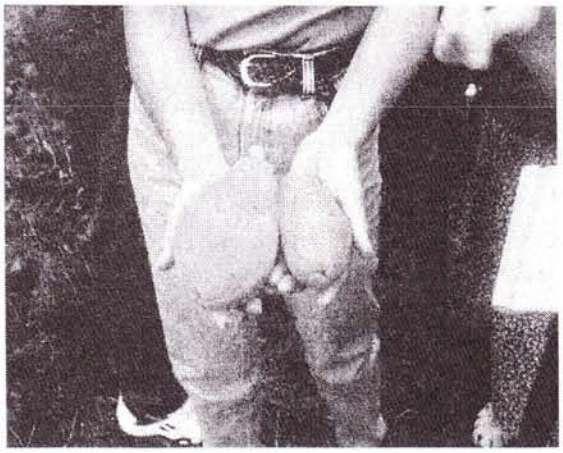
GM food...

Mindanao. The scientists clarified that the 'pollution' or gene flow could be easily prevented by planting different varieties at different times or isolating the variety.

As to the accumulation of GM product in the body, the scientists said that the new products in a GM crop is a small piece of DNA and 2-3 new proteins, common substances found in all foods that are usually digested or ejected from the body. These substances are easily degraded by soil microbes. Therefore, there is no danger for these GM products to accumulate in the body.

In conclusion, they said the GM crops that are disease-, insect-, and drought-resistant are needed by our Filipino farmers in facing the challenge to produce enough for our big population. They should be allowed to choose the technology appropriate to their conditions. Similarly, the consumers should be given the choice.

On government's part, it should strengthen the capacity of the scientific community in genetic engineering technology and support the rapid transfer of appropriate GMOs to farmers such as the Bt corn.



Genetically modified papaya vs a traditionally-grown papaya

Moreover, the government must strengthen the regulatory agencies and equip them with the capability to evaluate new products and technologies using sound scientific methodologies. It must ensure that only safe products reach the public and the environment.

On the part of the National Committee on Biosafety of the Philippines (NCBP), it must always safeguard the public and the environment from harmful genetic engineering experiments but must relax its stringent rules for appropriate experiments to flourish.

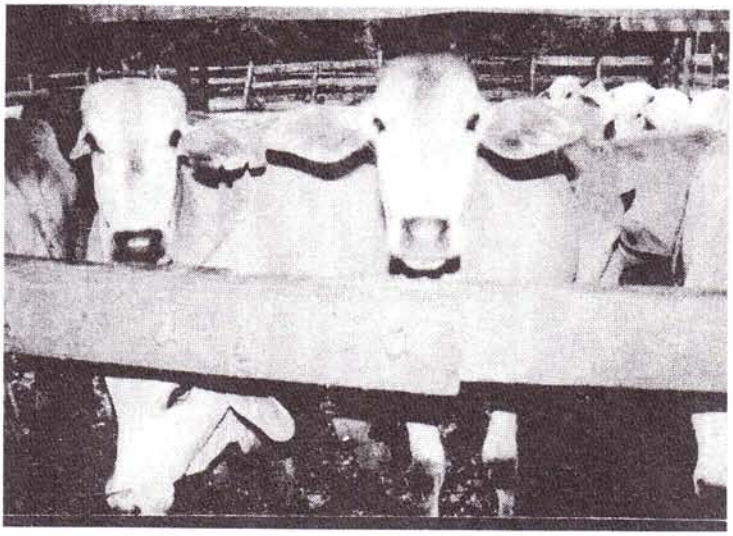
The scientists who represented their organizations in clarifying the issues include the following: Dr. Saturnina Halos, president, Women Association of Scientists in the Philippines; Dr. Evelyn Mae Mendoza, coordinator, Biotech Program, Institute of Plant Breeding, UPLB; Dina Masa, president, Women Inventors of the Philippines; Dr. Lydia Joson, president, Women in Science and Technology Foundation; Engr. Lydia Tansinsiní, president, Philippine Association for the Advancement of Science; Dr. Sonia de Leon, president, Foundation for the Advancement of Science and Technology; Dr. Nellie Lopez, director, Institute of Biology, College of Science, UP Diliman; Dr. Ernelia Cao, director, Natural Sciences Research Institute, UP Diliman; Dr. Leocadio Sebastian, president, Crop Science Society of the Philippines; and Dr. Nina Barzaga, director, National Institute of Molecular Biology and Biotechnology, UP Manila. *(Virginia A. Duldulao, PhD)*

Cattle under coconut trees as alternative income

□ *by Maria Rowena SA Briones*

The Tagkawayan farmers of Quezon Province needed a way out of the coconut field. But that way led them back to it. They found that growing cattle under coconut trees could be an alternative source of income.

An on-farm research project for upland development led by Estela Caringal, an agriculture technician from Department of Agriculture (DA)-Region 4, introduced a package of technology (POT) on cattle production that maximizes the use of available resources and manpower. The Agricultural Sustainability Advancement Project (ASAP) of the Bureau of Agricultural Research (BAR) is behind this undertaking.



The Package of Technology

The farmers were lent Brahman cattle and planted napier grass as supplementary pasture grass to meet the 40 kg per day grass requirement of cattle. Sheds for the cattle was built and concentrate feeds such as rice bran, copra meal, and grated cassava were given to the cattle whenever the farmer could afford them. Alongside these, parasite and disease control were provided by the local government and the Office of the Provincial Veterinarian. A farmers' training center was built where seminars were conducted and publications were provided. Infrastructures such as farm to market roads, bridges, and irrigation facilities were initiated.

Although housed in sheds, the cattle were allowed to graze daily. This way, they became acclimatized to the farm's conditions. Aside from pasture grasses and concentrate feeds, each cattle was given 30-50 g of salt and water per day. They were bathed at least once a week in the river to control ticks and lice. The cattle were dewormed and vaccinated against foot and mouth disease, hemorrhagic septicemia, and other common diseases.

For the cattle's pasture area, stem cuttings of napier about one foot long with 3-4 nodes were planted at a distance of 75 cm x 50 cm under coconut trees, along sloping hillsides, riverbanks and backyards. At shoot emergence, weeding and fertilization with urea at one tablespoonful per hill were done. After 6-8 weeks and 4-6 weeks thereafter, napier was clipped to maintain a 75 cm height from the ground. Animal waste was returned to the pasture area to help maintain vegetative growth.

The farmers' training center encouraged community participation and facilitated the provision of support services for the project to be sustainable. It served as the venue for trainings, seminars, meetings, and informal discussions held throughout the project's duration. Aside from local literature on cattle production, the farmers were taught agro-forestry, sloping agriculture land technology, and of root crops production such as sweet potato and cassava for food and animal feeds. They were also informed of the current programs of the DA.

The project lobbied for the prioritization of infrastructures such as farm to market roads, bridges, and irrigation that the farmers needed. These were finally provided by the Local Government Unit (LGU). The electrification of hinter barangays had also been started.

The POT yielded more profits than the use of traditional management and native stocks. An eight- month old calf can be sold at a minimum price of P9,000 per head. As early as 3-6 mos after Brahman cattle is procured, it can already be sold with a net gain of P500-1000 per month, per head. In fact, its contribution to the total family income of the farmer- cooperator is higher than that of other livestocks. As a result, the farmers were able to go into tricycle driving and peddling.

Adjustments

The farmers were familiarized with the reproductive physiology and artificial insemination (AI) since the purebred female Brahman could not conceive through natural method. To address this, the National Artificial Breeding Center (NABC)for Large Ruminants promised to provide AI kits and semen of quality cattle stocks and the Dairy Training and Research Institute (DTRI) in UP Los Banos) to train technicians.

The farmers wanted to be trained and given exposure in the marketing of their cattle to minimize their dependence on middlemen and to avail of the services of credit institutions.

On the other hand, DA-LGU emphasized the need for the farmers to have an organization or a cooperative so they can venture into a new form of livelihood as cattle production. One important aspect that the project was able to prove was the ability for both the farmers and the LGU in working together to optimize the town's resources and promote sustainable technologies.

Source: Caringal, Estela et al. An Integrated Approach for Cattle Production Under Coconut in Poverty Stricken Areas of Bondoc Peninsula (1998-2000).

DA celebrates Farmers´- Fisherfolk`s Month

In recognition of the farmers and fisherfolk sectors' contribution to the government's national program on food security, poverty eradication, and overall national economic development, the Department of Agriculture (DA) will celebrate the Farmers' and Fisherfolk's Month this May.

With this year's theme, *Makabagong Sakahan at Pangisdaan Susi sa Kaunlarang Panlipunan*, the event will feature different activities to further promote agricultural productivity through these two important sectors in agriculture. The celebration will kick off with a motorcade, a thanksgiving mass, and an opening program on May 2. Also on this day, promising new technologies like the coco diesel of the Philippine Coconut Authority (PCA), the embryo transfer for dairy buffalo of the Philippine Carabao Center (PCC), and the thornless durian of the Bureau of Plant Industry (BPI) will be introduced. Other research breakthroughs will be presented by Bureau of Agricultural Research (BAR) Director Eliseo R. Ponce.

The event will also highlight the launching of two major DA projects namely, Innovative Financing Scheme of the Quedancor and the Agricultural Credit Policy Council (ACPC), and the Irrigation Project of the National Irrigation Administration (NIA).

Different programs and projects of the DA that could benefit and boost the development of the farmer and fishing sectors will be highlighted through an Agri-Aqua Fair. The opening of the fair will be followed by a series of technical sessions by the livestock, fishery, grain, and High Value Commercial Crop sectors. Other activities are:

- *Farmers' Training on Tobacco- based Integrated Framing System (NTA, PhilRice)*
- *NAFC Anniversary (NAFC)*
- *Lecture on Integrated Pest Management (BPI)*
- *Round Table Discussion for Drafting of E.O. on Soil Conservation (BSWM)*
- *Philippine Society of Soil and Technology Annual Convention (PCARRD, BSWM, UPLB)*
- *Infanta Municipal Fishport Launching (PFDA)*
- *Mushroom Culture (BPI)*
- *Launching of Enhanced Heat Pipe Multi Crop Driers (BPRE, RFU 5, UPLB, LGU)*
- *Agri-Fisheries Stakeholders Summit (NAFC)*
- *FYDP/4H Club (ATI)*
- *Seminar Workshop on Fruits and Vegetables Processing and Presentation (BPI) (RIC) Convention*
- *ATI Launching of DA-DND Livelihood Complementation Program (DA-FOS/ATI)*
- *Puerto Princesa Municipal Fishport Launching (PFDA)*
- *Demo on the Utilization of Tramline System for HVCC Handling (BPR, DA-CAR, LGU)*
- *BPRE Anniversary & Postharvest Festival (BPRE)*
- *Small Ruminants Congress (CLSU)*
- *FA/PMP (ATI)*
- *FPA Anniversary (FPA)*
- *Launching of ISULAN Farmers Service Center for Corn (BPRE, RFU 12, LGU)*
- *International Symposium on Sustainable Soil and water Resources Management (BSWM)*

(Rita T. dela Cruz)

ERP...

As for enhancing the science output, it was proposed that the TAC (Technical Advisory Committee) should operate as a scientific research council and act as the hub of a global network of experts working for CGIAR centers and their partners.

The CDMT also recommended that CGIAR Chairman Dr. Ian Johnson engage in a high-level dialogue with investors to expand multi-year funding for CGIAR activities. Moreover, each GCP should be responsible for raising the funds it needs for the duration of the program.

The establishment of a Center Common Office or CCO was proposed on a budget neutral basis to provide common services to the centers and GCPs. The CDMT also emphasized the need for the CGIAR to clarify its position on restructuring and set aside funds to finance the costs associated with restructuring activities.

Finally, the CDMT recommended that an Executive Council be created and new decision making processes sketched out. The Executive Council will ensure that there is congruence among strategy, structure, financing management systems in the whole CGIAR community.

Dr. Donal O' Hare acted as the facilitator of the discussions. Participants to the final meeting included CDMT members, CGIAR centers representatives, co-sponsors, Southern members, contributors, international foundations, and partnership committees.

The output of this final meeting will be included in the final paper that will be presented by the CDMT during the Mid Term Meeting (MTM) in Durban, South Africa this May. *(Junelyn S. de la Rosa).*

Web NEWS

Research gives birth to Nigerian soybean industry
http//:www.futureharvest.org

Wastewater irrigation:economic necessity or threat to health and environment?
http://www.futureharvest.org

Dairy let drunk milkmen drive
http://www.thetimes.co.uk

Rebel farmer loses asylum plea
http://www.theherald.co.uk

NARS Forum: EMBRAPA launches specialized forum on funding strategic and mechanism for agricultural research
http://www.egfar.org

Calls for expressions of interest as agricultural research project reviews
http://www.aciar.gov.au

BAR officials´admin and finance management skills enhanced

Key officials of the Bureau of Agricultural Research (BAR) attended a three-day training to develop their administrative and financial management skills. This was held at the International Training Center for Pig Husbandry (ITCPH), Lipa City, Batangas on 18-20 April 2001.

With the strengthened mandate of BAR under the Agriculture and Fisheries Modernization Act (AFMA), efficiency in the delivery of public service is important. As an output of the training, the participants came up with a unified interpretation of the rules and regulations regarding the Bureau's administrative and financial management system thereby, achieving harmony, order, and smooth flow of operations.

A manual on BAR Administrative and Financial Operating Procedure prepared by Ms. Teresita Lalap, a technical expert, served as the main reference material for the training. The manual contains a simplified and systematized set of established government guidelines and procedures including the processing time for each transaction, delineation of responsibilities, and definition of accountabilities.

The training was composed of three topics of eight modules namely: A New Perspective which discussed the BAR Organizational Structure and the Manual for Administrative and Financial Management; Administrative Management which revolved around Property Accountability and Requisitioning, Personnel Administration, and Records Management; Financial Management that

See BAR officials, page 5

Director Ponce elected ExeCom chair AVRDC board

BAR Director Eliseo R. Ponce was elected as the new Executive Committee chair of the Asian Vegetable Research and Development Center (AVRDC) during its recently concluded 34th meeting of the Board of Directors. The event was held at the AVRDC Headquarters in Shanhua, Tainan, Taiwan, Republic of China on April 24-26 April 2001.

The event was highlighted by four concurrent committee meetings, namely: 1) Executive Committee (EXECOM) meeting, 2) Program Committee (PROCOM) meeting, 3) Auditing Committee (AUDCOM) meeting, and the 4) Nomination Committee (NOMCOM) meeting.

The outputs of the four concurrent meetings were presented and discussed during the two-day board meeting held the following day. Mr. Declan J.Walton, chairman of the Board, presided the two-day activity. Specific agenda were: 1) approval of the minutes of the 33rd Board Meeting, 2) financial report, 3) findings of the external review, 4) comments/responses to the Review Panel's recommendations, 4) EXECOM report, 5) PROCOM report, 6) long-term strategy development, 7) Revised staff policies for the IRS and the NRS, 8) NOMCOM report, and 8) other matters.

Fourteen AVRDC board members attended the meeting, namely: Mr. Declan J. Walton (Chairman), Drs. Samson Tsou (Director-General), Paul M.H. Sun, Anna Ferro-Luzzi, Lucas Phirie-Gakale, Yu-Tsai Huang, Kim Kang-Kwun, Te-Yeh Ku, Richard L. Lower, Eliseo R. Ponce, Gilles Saint-Martin, Thira Sutabutra, Hiroaki Yoshikawa, Ms Beate Weskopf, and Mr. Tetsuo Yamashita. *(Junelyn S. de la Rosa).*

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