# ANNUAL REPORT 2003



BENGUET STATE UNIVERSITY

# VISION

A premier
University that
develops human
resources imbued with a
culture of excellence and
social consciousness,
and promotes environmentfriendly technologies
to uplift the quality
of life.

# MISSION

BSU shall pursue sustainable resource development through quality instruction, client-oriented research, participatory extension and viable production system.

# BSU Annual Report Task Force

Chairman: Dr. Darlyn D. Tagarino
Members: Dr. Marlene B. Atinyao, Dr. Erlinda B. Atupias
Support Staff: Ms. Ahri Christine A. De Mesa, Julie Ann R. Dugat, Flordeliza O. Naje
Contributors: Vice Presidents, Deans, Directors and Unit Heads
Editor: Dr. Rodolfo T. Abastilla
Consultant: Dr. Rogelio D. Colting

# Republic of the Philippines BENGUET STATE UNIVERSITY

La Trinidad, 2601 Benguet

4 May 2004

HER EXCELLENCY

President Gloria Macapagal-Arroyo

Malacañang Palace, Manila

Thru: Hon. Rolando R. Dizon
Chairperson, Commission on Higher Education
and BSU Board of Regents
DAP Building, San Miguel Avenue
Ortigas Center, Pasig City

#### MADAM:

I have the honor to submit the Annual Report 2003 of the Benguet State University. It summarizes our accomplishments as reflected in the programs, activities and projects that go in line with our vision and mission. Our achievements center on our four primary functions: instruction, research, extension and production.

This humble report manifests our strong commitment to perform our mandates with excellence, relevance and productivity for a strong Republic.

More power to you.

ROGELIO D. COLTING
President

# **Table of Contents**

T	Page
Transmittal Letter Table of Contents	i ii
Foreword	iii
Executive Summary	iv
ACADEMIC AFFAIRS  Enrollment Graduates Performance in Licensure/ Board Examination Student Awards Student Organizations Faculty Development Accreditation University Health Services University Registrar University Library Services Open University	1 2 4 7 8 9 9 12 13 13 14
RESEARCH, DEVELOPMENT AND EXTENSION  Technologies/ Significant Information Generated  Programs/ Projects Implemented  Extension Services  Publication  R and D Awards  Linkages/ Partnership  RDE Staff Development	17 18 23 29 35 36 36 39
PRODUCTION Income Generating Projects New Projects Implemented Salient Development on Production	41 41 42 42
ADMINISTRATION  Governance  Administration Staff Development  Financial Resources	44 45 47 50
MAJOR FOREIGN LINKAGE  ■ The PIUC	51
BUGUIAS CAMPUS	53
BOKOD CAMPUS	55
A FORWARD LOOK  Meeting Challenges Head On	56 56
BOARD OF REGENTS	58
ADMINISTRATIVE COUNCIL	59
ORGANIZATIONAL STRUCTURE	60
PROPOSED ORGANIZATIONAL STRUCTURE	61
ACADEMIC PROGRAMS	62

# Foreword

Under the new leadership which was installed in July 2003, a new vision was crafted with the participation of all stakeholders. The new vision is for BSU to be a premier state university developing human resources imbued with a culture of excellence and social consciousness and empowered to compete in a global society. It also considers BSU as a regional research center generating and ecologically promoting sound technologies for the development of man and the environment.



Building on with the excellent programs of the previous administration and guided by the new vision, the University is moving forward and continuing to serve its clientele with renewed commitment and dynamism. Strategic networks with local and international institutions and alliances with the private sector are also being pursued in the areas of instruction, research, extension services and income generation.

The concerted efforts of all sectors in the university and the community must be commended. With the strong support of everyone, BSU was able to accomplish much this year. It shall continue to do so and it shall maintain its key role in the development of the Cordillera region and the country as a whole

The present leadership of the University acknowledges the great contribution of the administration of Dr. Cipriano C. Consolacion, BSU President until his retirement in June 2003, for the various accomplishments presented in this annual report

Rogelio D. Colting, Ph. D. President

# **Executive Summary**

2003 was marked by the appointment of a new president who took over the wheel from retiring Dr. Cipriano C. Consolacion. The first half of the year was characterized by the search for a new president and the preparations for a smooth turnover; and the other half, by the testing of the waters for the new president to set sail towards an enhanced University vision and mission.

These events underwent a peaceful and orderly process. Thus, the University came up with achievements that it can be proud of. As an overview, these achievements are as follows:

#### ON ACADEMIC AFFAIRS

A total of 1,072 graduated from the various undergraduate and graduate programs. For the year, offered were eight doctoral degrees, 28 Master of Science/Art degrees, 16 undergraduate degrees, three post BS non-degree programs, four post secondary non-degree programs and two special courses. Total enrollment as of first semester of school year 2003-2004 was 7,032 in all courses. For the graduates of SY 2002-2003, 25 undergraduate students were *cum laude*.

The University continued to perform well in licensure examinations. It exceeded national standards in 8 out of 11 examinations scheduled during the year. Notable performance was made by the College of Teacher Education graduates for the teacher examinations in both the elementary and secondary levels. Two board takers placed sixth and ninth in the Licensure Examination for Veterinarians. The university ranked

fourth in the Board Examination for Librarians and firth in the Board Examination for Agriculturists.

Scholarship grants were given to 934 and 563 students during the first and second semesters, respectively. Two BSU athletes bagged gold and bronze medals in the SEA Games in Vietnam.

The faculty consist of 82 Ph/Ed and 126 MS/MA degree holders. Three faculty members obtained their doctorate and nine their masters in 2003.

Seventy student organizations were accredited for the year. The Highland Cowboys/girls brought home laurels as 1st and 2nd runner ups in Rodeo competitions. The same organization notched the 7th place in the Ten Accomplished Youth Organization award bv the National Youth. Commission and the Jaycees. Betty Listino and Brenda Allav. Presidential Youth Fellows and as two of the ten outstanding students of CAR.

The integrated campuses of Buquias and Bokod had total enrolments of 356 and 747. respectively. The Buguias campus graduated 33 in the Bachelor of Secondary Education, BS Industrial Education and in various short courses. The Bokod campus graduated 54 for the BS Industrial Education and in the BS in Industrial Technology courses.

The University continued to ensure quality auxiliary services by hiring of a new dentist and assigning a part-time faculty medical technologist for health services, and designating a new

registrar to implement new procedures and processes for effective and efficient admission services. Support for the modernization of the University library was continued with the acquisition of 699 book titles, 73 periodical titles, 73 titles of subscriptions and two electronic titles.

#### RESEARCH AND EXTENSION

Significant technologies generated, include development of a sweetpotato variety named BSU SP02 or "Bengueta," development of seven organisms for bio-control chrysanthemum diseases, identification of promising varieties of potato and garden pea resistant to leafminer and other diseases, and varietal/clones selection of potato and yams with potentials for processing.

The University for 2003 has about 77 research and development projects/studies conducted Horticultural Research Institute. Institute of Highland Farming Systems and Agroforestry, the Institute of Social and Development. Research Northern Philippine Rootcrops Research and Training Center, and selected colleges.

The BSU On-the-Air through DZWT is a regular program of the where significant University technologies information were and disseminated. An array of about 70 different topics were aired through this program for the year 2003. A new scientific publication that features papers, called the RDE Forum, was published alongside four volumes of the BSU Research Journal and two issues the RANGTAY. Five technical of materials and eight leaflets and pamphlets were widely distributed.

Two quick-response services were provided to the municipalities of Kabayan on the control management of earthworm and the rejuvenation of coffee and rooting methods of mountain Four participatory technology adoption projects were implemented. Numerous trainings and on-farm demonstrations were also conducted.

Twenty technical papers were presented in various training, seminars and workshops by faculty staff and researchers. Five R & D awards were obtained in regional symposia. About 37 linkages/partnerships with local and international organizations forged/implemented during the year. The RDE staff attended/participated in about 30 seminars, workshops, trainings and technical meetings. Two RDE personnel went on long-term scholarship.

#### **PRODUCTION**

An income of \$\frac{19}{26}\$ million was gained from income-generating projects. More than ₱2 million came from agricultural projects and ₱749.270 from non-agricultural projects. Two new projects for the year were the buildagreement lease-transfer with McDonald's Corporation and the operation of the Freshdrops Purified Water Refilling Station.

#### GENERAL ADMINISTRATION

Dr. Rogelio D. Colting upon assumption of office bared a 10-point agenda for his 100 days administration, fruits of which became apparent at the end of the period. A new administrative team was organized with three new Vice Presidents, and a number of new deans, directors and

chairpersons. department Similar changes in the University Board of Regents took place with the appointment of Bro. Rolando R. Dizon as the new Chair of the Commission on Higher Education and concomitantly. chair of the Board of Regents. Two other new members of the governing board were the presidents of the BSU Faculty Club and the Supreme Student Council, respectively.

For 2003, the University Administrative Council held seven regular meetings and four special meetings. A total of 101 resolutions were acted upon during these meetings. The Board of Regents passed 69 resolutions.

From August to December, the new leadership instituted a series of activities that were aimed at reviewing and streamlining University operations. With these activities, were identified a financial management protocol was

drafted; areas for improvement in University operations were identified by a team of internal and external reviewers; and the Medium-Term Plan 2004 to 2007 and Ten-Year Strategic Plan 2004 –2012 were revised.

Financial management improved through the operationalization of the University budget committee, deliberations on proper use of university resources and minimization disallowances. Fund sourcing intensified through networking. linkage with Saint Louis University and the Flemish universities of Belgium remain a vital source of developmental funds.

Definite steps to realize specific future goals are specified in the BSU Medium-Term Plan 2004-2007, a comprehensive document that presents the new vision, mission, goals and objectives of the university.

# ACADEMIC AFFAIRS

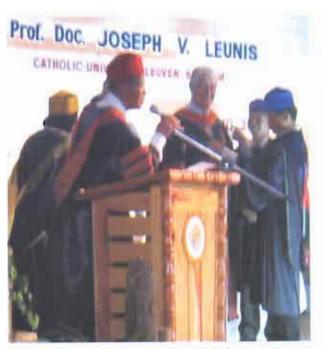
#### The Year that was 2003 . . .

As a premier academic university in the Cordillera, Benguet State University pursues excellence. Proof to this is the remarkable performance of its graduates in the various licensure examinations and in various international, national, regional and local competitions. True to its mandate, BSU strives to mold students who enter into its portals into graduates excelling in their fields of endeavor and being responsive to the needs of times.

Enrolment for SY 2003-2004 was slightly lower than that in SY 2002-2003. However, the enrolment in post-secondary short courses more than doubled, an indication that more students are opting for skills training. Although enrolment decreased, the number of graduates increased, with the greatest increase in the number of graduates in postgraduate diploma and certificate courses.

The University, in its pursuit of academic excellence, has a faculty development program that is responsive to the needs of times. faculty members were given the privilege to pursue higher degrees and to write publications. As a result, five faculty members finished their MS and three finished their PhD in various fields in 2003. Six faculty members given study leave privileges are expected to finish their courses in 2004. Faculty members are also encouraged to attend conferences, symposia, trainings. seminars. workshops and the like in order to broaden their perspective and make them better human engineers and agents of change.

The University continues to nurture its students by providing not only quality education but also by giving them the oppurtunity to pursue their degrees through scholarship grants. It fully supports student activities by financially supporting them to join competitions and attend seminars ,symposia and conferences. Indeed 2003 has been an exhausting but rewarding year for both students and faculty.





#### Enrolment

In the first semester of 2003-2004, the total enrollees in the various academic programs being offered in the Universitry were 7,032. Of the total enrollees, 86.97% were enrolled in the various baccalaureate programs in the different colleges, 9.34 % in the doctorate and master programs and the

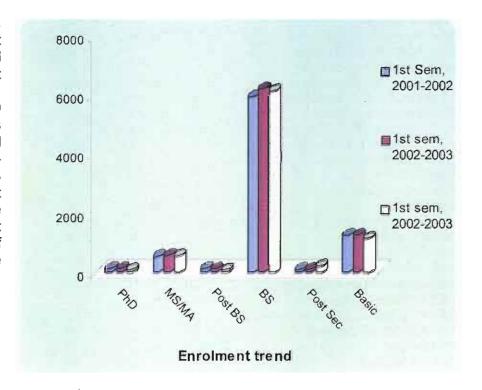
remaining 3.68 % in the diploma, certificate and other classes being offered in the University. In the second semester, enrollment in the doctorate, master and bacalaureatte programs slightly decreased but enrollment in the diploma, certificate and other classes increased.

<b>Enrollment in</b>	the different	t curricular	programs
	tile different	- our round	programs

DEGREE	PROGRAM	2 <sup>ND</sup> SEM. 2002-03	SUM 2003	1 <sup>ST</sup> SEM 2003-04	2 <sup>ND</sup> SEM 2003-04
PhD in	Agricultural Education	4	1	2	2
	Agronomy	6		4	7
	Educational Management	18	13	25	18
	Horticulture	4	5	4	9
	Language Education	11		11	8
	Rural Development	42	11	36	39
	Science Education	4	4	3	6
EdD in	Educational Management	24	9	13	7
MS in	Agricultural Education	8	10	11	12
	Agronomy	5		5	5
	Animal Science	5	1	3	7
	Biology	22	12	16	18
	Economics	2			
	Entomology	6		7	4
	Extension	2	2	2	2
	Forestry: Silviculture	2		2	3
	Forestry: Watershed	11		11	8
	Management			[	
	Horticulture	11	1	4	5
	Plant Pathology	1 1	2	7	6
	Rural Development	27	8	24.	19
	Soil Science	3	1	6	10
MA in	Applied Statistics	11	3	14	14
	Chemistry	13	8	10	8
	English as a 2 <sup>nd</sup> language	40	46	49	54
	Filipino as a 2 <sup>nd</sup> language	17	26	12	12
	General Science	10	18	14	13
	Home Economics	18	14	16	13
	Mathematics	43	33	32	32
	Physical Education	66	63	47	38
	Physics	7	6	6	11
	Technology & HE	11	9	5	4
	Social Studies	26	24	23	32
MAEd in	Contextual Instruction	4	1	0	0
	Educ'l Admn & Supervision	56	44	57	46
	Elementary Education	96	73	92	94
2000 mar 10 m 2	Guidance & Counselling	16	8	21	21
	Public Administration	86	34	61	62
	f Resource System Management	5	0	2	2
Subtotal		753	490	657	651

DEGREE PROGRAM	2 <sup>ND</sup> SEM. 02-03	SUM 03	1 <sup>ST</sup> SEM 03- 04	2 <sup>ND</sup> SEM 03- 04
B. Elementary Education	843	80	870	902
B. Secondary Education	964	68	1142	1017
B.S. Agriculture	966	217	1118	1092
B.S. Agribusiness	197	44	134	185
B.S. Agricultural Education	213	46	212	204
B.S. Agricultural Engineering	260	37	293	309
B.S. Applied Statistics	78	2	92	88
B.S. Development Comm.	124	35	134	135
B.S. Environmental Science	249	81	212	220
B.S. Entrepreneurship	128	28	144	52
B.S. Forestry	243	82	226	205
B.S. Home Economics	369	38	361	330
B.S. Information Tech	106	28	129	110
B.S. Nursing	399	203	489	458
B.S. Nutrition & Dietetics	148	35	166	165
Doctor of Veterinary Med	354	38	394	370
Subtotal	5,641	1,062	6,116	5,842
Diploma in Physical Education (Post BS)	19	15	16	16
Diploma in Agro-forestry (Post Sec)	67	30	77	71
Certificate in Automotive Tech (Post Sec)	34	0	49	53
Forest Ranger Certificate Course (Post Sec)	32		39	58
Cross-enroll	24	0	0	51
Special Class	82	0	0	101
Subtotal	146	45	259	350
GRAND TOTAL	6540	1597	7032	6843

Enrolment trend. There was а slight decrease (-0.64%) in total enrolment in the first semester of 2003-04. The enrolment in PhD and post-BS courses decreased by 16% and 20%, respectively. However, there was a 134% increase in the post secondary non-degree courses, an indication that an increasing number of high school graduates are opting for skills training.



# Graduates

A great majority of graduates (85.54%) in 2003 were those who finished different baccalaureate degrees. Only 5.32% (57) finished master degrees and 2.05% (22) doctorate degree. Of the baccalaureate degrees, most were graduates of courses in teacher education (36.75%) and agriculture (17.16%)

The Number of graduates was 5.92% higher in 2003 as compared to 2002. Except in the post-high school courses, graduates in the graduate, baccalaureate, post-baccalaureate degrees increased in 2003.



PROGRAMS	March 2003	May 2003	October 2003	Total
Graduate Degree				
PhD in Agronomy	2			2
PhD in Agricultural Education	1			1
PhD in Language Education	1	1	1	3
PhD in Rural Development	8	1	1	10
PhD in Science Education: Biology	1			1
EdD in Educational Mgmt	5			5
MA in English as a 2 <sup>nd</sup> Language	1	3	1	5
MA in Filipino as a 2 <sup>nd</sup> Language		1	1/	1
MA in Home Economics		2		2
MS in Mathematics	2			2
MA in Physical Education	6	1	2	9
MA in Physics	2			2
MA in Rural Development	2	1		3
MA in Social Studies	2	3		5
MA in Statistics	1			1
MAEd in Administration & Supervision.			1	1
MAEd in Elementary Education	2			2
MAEd in Context. Instruction	1		. 1	2
MAEd in Guidance and Counselling		1		1
MS in Agricultural Education	1	1		2
MS in Biology	1			1
MS in Horticulture		1		1
MS in Forestry	1			1

10

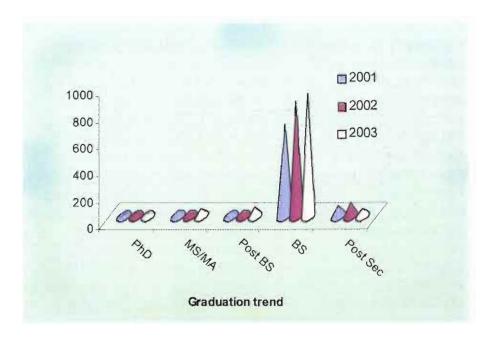
14

MPA

Subtotal	50	20	9	79
Undergraduate/BS Degree				
BElementary Education	165	1	10	176
B. Secondary Education	150	1	12	163
B.S. Agriculture	131	5	18	154
B.S. Agriculture Education	45	0	10	55
B.S. Agribusiness	25	0	5	30
B.S. Agricultural Engineering	18	2	0	20
B.S. Animal Technology	1	0	0	1
B.S. Applied Statistics	16	0	1	17
B.S. Development Communication		0	2	27
B.S. Environmental Science	41	4	1	46
B.S. in Forestry	45	1	8	54
B.S. Home Economics	87	0	0	87
B.S. Information Technology	18	1	0	19
B.S. Nursing	36	0	0	36
B.S. Nutrition and Dietetics	16	0	0	16
Doctor of Veterinary Medicine	16	0	0	16
Subtotal	838	15	67	917
Non-degree				
Diploma in Physical Education (Post BS)	10	0	0	10
Diploma in Agro-forestry (Post Sec)	24	0	0	24
Certificate in Automotive Tech (Post Sec)	33	0	0	33
Forest Ranger Certificate Course (Post Sec)	4	0	5	9
Subtotal	71	0	5	76
GRAND TOTAL	959	35	76	1072
GRAND TOTAL	909	აა	/6	- 1

## Graduation trends.

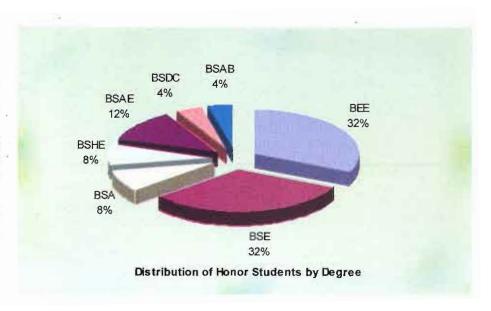
The total number of graduates for school 2002-2003 year increased by 5.92%. The greatest increase was posted by post-BS courses with 65.91%, а followed by Ph.D There graduates. was a decrease in the number graduates in the nondegree postsecondary courses.



# Honor Graduates

For SY 2002-2003, there were 25 honor students, comprising 2.98% of the total graduates in the different baccalaureate degrees in May 2003. A great majority of the honor students (76%) were from the teacher education degrees.

The names of the honor students are listed below.



## List of graduates with honors SY2002-2003

NAME OF STUDENTS	DEGREE	HONOR
AGTULAO, Bona C.	Bachelor of Elementary Education	Cum Laude
ALBIS, Agustina B.	Bachelor of Elementary Education	Cum Laude
ALLAY, Brenda B.	Bachelor of Secondary Education	Cum Laude
ALLIG, Blessilda D.	Bachelor of Secondary Education	Cum Laude
AMPAGUEY, Margarette P.	Bachelor of Elementary Education	Cum Laude
BANDA-AY, Gennie B.	Bachelor of Science in Agriculture	Cum Laude
BINAY-AN, Jennilyn A.	Bachelor of Secondary Education	Cum Laude
BOLIDE, Lily Ann B.	Bachelor of Elementary Education	Cum Laude
BOTILAS, Maksim A.	Bachelor of Secondary Education	Cum Laude
CALUZA, Irenia L.	Bachelor of Elementary Education	Cum Laude
CAROPE, Agustina L.	Bachelor of Secondary Education	Cum Laude
CAYAT, Elena B.	Bachelor of Science in Home Economics	Cum Laude
FELIX, Rubelyn B.	Bachelor of Science Agricultural Education	Cum Laude
GAMBOA, Juliet S.	Bachelor of Science Agricultural Education	Cum Laude
IBAAN, Jocelyn C.	Bachelor of Secondary Education	Cum Laude
KIAT, Dionisia L.	Bachelor of Secondary Education	Cum Laude
LIGLIGEN, Jennifer G.	Bachelor of Elementary Education	Cum Laude
LISTINO, Betty C.	Bachelor of Science in Development Communication	Cum Laude
MACARIO, Jennifer F.	Bachelor of Secondary Education	Cum Laude
MANGAPAN, Jemma Rose P.	Bachelor of Science in Agriculture	Cum Laude
MAY-OS, Jineline B.	Bachelor of Elementary Education	Cum Laude
PALAEZ, Ferlyn B.	Bachelor of Elementary Education	Cum Laude
SUAKING, Febrona B.	Bachelor of Science Agricultural Education	Cum Laude
SUBNA-EN. Jo-anne B.	Bachelor of Science in Home Economics	Cum Laude
TIBAO, Normalyn Y.	Bachelor of Science in Agribusiness	Cum Laude

#### Performance In Licensure/Board Examination

In most of the licensure and board examinations, the University surpassed the national passing percentage. In the licensure examination for veterinarians, Paul T. Fronda and Val F. Felizardo placed

6<sup>th</sup> and 9<sup>th</sup>, respectively. The University ranked 4<sup>th</sup> in the board examination for Librarians in 2003. In like manner, BSU ranked 5<sup>th</sup> in the licensure examination for Agriculture.

#### Performance in licensure examination

PROFESSION	NO. OF EXAMINEES	DATE OF EXAMINATION	NO. OF PASSERS	BSU PASSING, %	NATIONAL PASSING, %
Licensure Exam for					
Agriculturist	180	July 17, 2003	53	29.80	21.00
Agricultural Engineer	20	July 2003	7	35.00	38.00
Teacher - Elem (HE)	39	Aug. 31, 2003	25	64.10	26.23
Teacher - Sec (HE)	38	Aug. 31, 2003	16	42.10	26.26
Nutritionist	21	Jul 14-15, 2003	7	33.30	50.00
Forester Licensure					
Examination	70	June 2003	23	32.86	33.61
Veterinarian	31	Jul 30-31,2003	14	45.16	31.00
Nursing	34	Jun 2003	19	55.10	52.76
7 0044M	12	Dec 2003	8	66.66	43.42
Teacher - Elem	90.0	The state of the		69.65	26.23
Teacher - Sec				53.10	33.80

# Student Scholarship

Student scholarship is under the auspices of the Office of Student Affairs. For the the first semester, a total of 934 students, which comprise 15.27% of the total population, enrolled in the various undergraduate degree programs. They

enjoyed various scholarship and grants from either government or private agencies or individuals. In the second semester, the number of students declined by 563. The greatest decline is on the number of SK/DILG dependents, from 545 to 116.

#### Student scholarships and the number of students that avail of the scholarships

SCHOLARSHIP	NUMBER (	OF STUDENTS
	1 <sup>ST</sup> Semester	2 <sup>nd</sup> Semester
Government/National Scholarship and Grants		
Department of Science and Technology	3	4
State Scholarship Program	10	11
National Integration Study Grant Program	18	26
Selected Ethnic Group Education Assistance Program	20	23
Special Study Grant Program	0	1
Sen. Juan Flavier Scholarship	0	3
Se. Teresa A. Oreta Scholarship	0	7
La Trinidad Scholarship	0	3
Dept. of Agrarian Reform Scholarship	0	18
GSIS Educational Plan	3	3
Phil. Agriculture & Resources Research Foundation, Inc.	1	2
Subtotal	55	101

0 17 24 1 64 545 <b>869</b>	12 14 26 0 52 116 <b>425</b>
17 24 1 64	14 26 0 52
17 24 1	14 26 0
17	14 26
17	14
0	12
16	13
28	24
78	69
15	12
5	7
0	4
35	0
41	76
10	37
0	5
0	18
2	2
3	0
	. 0
3	12
	0 10 41 35 0 5 15 78 28

## Student Awards

Student awards	from	international and
national con	nnefit	ions

- Best Paper (Junior Category), awarded by the Philippine Society of Soil Science and Technology to Cirilo A. Lagman, BSA Soil Science Major
- Presidential Youth Fellow, awarded to Betty C. Listino, BSDC
- Ten Outstanding Students of CAR (TOS-CAR) awarded to Brenda B. Allay, BSE and Betty C. Listino, BSDC
- 7<sup>th</sup> Place in Ten Accomplished Youth Organizations (TAYO) in the Philippines, awarded by the National Youth Commission and Jaycees to the Rodeo Club, DVM
- 1<sup>st</sup> Runner up, Rodeo Competition, garnered by the Highland Cowboys/girls, DVM
- 2<sup>nd</sup> Runner up, Rodeo Competition, won by the Highland Cowboys and girls, DVM
- Bronze Medal, World Muaythai Championship, won by Jennifer Laquiland
- Bronze Medal, SEA Games, Hanoi Vietnam, won by Jennifer Laguilang
- Gold Medal, Mushu-Sanshu, SEA Games, Hanoi, Vietnam, won by Dolly Andres
- 5<sup>th</sup> Place National Milo Marathon (Nov, 2003), won by Marichiel Mlnas



# Student Organizations

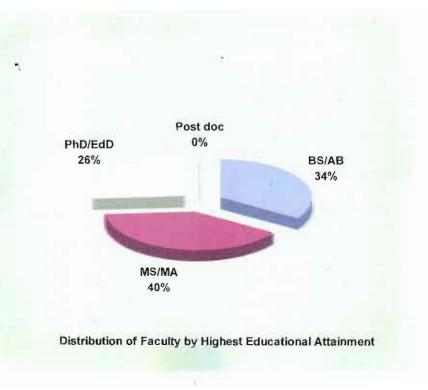
The Office of Student Affairs is tasked to facilitate students' growth and development outside the classroom through its proactive development activities and enhanced student Under the student affairs are 71 services. registered students organizations in the University classified into four mandated organizations: 38 college-based (or affiliated) organizations and 29 religious, athletic and other non-affiliated organizations. In 2003. five student organizations registered but are still probationary status. These include organizations two non-affiliated organizations (Emissary and Progressive Igorots for Social Action), two religious organizations (Cordillera Crusaders' Society and Inter-Varsity Christian Fellowship), one athletic organization (Athletics Club) and one affiliated organization (Library Science Association). Student organizations are encouraged to conduct their own activities.



# **Faculty Development**

performance Student reflects the educational quality provided by the University's faculty members. The University has 315 members as of December 2003. Compared to last year, the number of faculty increased by 2 (0.64%). For the faculty, the number of BS/AB degree holders decreased by 3.5% but the number of MS/MA state PhD holders increased by 2.46% and 3.85%, respectively. This change was brought about by a functional faculty development program of the University and the implementation of the policy on hiring, specifically on the educational attainment of tertiary instructors.

The faculty development program of the University includes scholarship grants for higher degree and training and



sabbatical leaves. The list of faculty members who finished their degrees and those studying are listed below.

# Faculty who finished their degrees in 2003

- AGALDANG, Jackson L.; CEAT; MS Eng'g and Agri-Chain Management; Larenstein University of Professional Education
- AGLANO, Alma M.; CTE; MA Math; Benguet State University
- ANONGOS, Stanley; CAS; MAEd Social Education; Benguet State University
- BATACLAO, Ronda C.; CAS; MA Filipino as a 2<sup>nd</sup> Language. Benguet State University
- FANGWA, Penelope P.; CAS; MA Filipino, Benguet State University
- GAMBOA, Imelda K.; CTE; MAEd English, Benguet State University
- PAWID, Harland Gary B.; IPES; MA Physical Education, Benguet State University
- SINGA, Victor P; CTE; MS Agricultural Education; Benguet State University
- BELAO, Lourdes A.; CAS; Ph.D. Language Education; Benguet State University
- GOMEZ, Romeo Jr., A; CAS; Ph.D. Environmental Science; University of the Philippines
- PALAZO, Maribel Z.; CAS; Ph.D. Language Education; Benguet State University
- TAD-AWAN, Belinda A.; CA; Ph.D. Agronomy; Benguet State University

#### Faculty granted scholarship, as of December 2003

- BANANIA, Norma P.; CHET; MS; Benguet State University; June-October 2003
- TAAG, Gregorio C.; CAS, MS Psychology; Saint Louis University; August 1-31, 2003
- ALFONSO, Gerry M.; CF; Ph.D. Rural Development; Benguet State University; June 2003-2005
- MILAGROSA, Aimee P.; CA; Ph.D. Education; Wageningen University, The Netherlands; March 2003-February 2005)
- PIÑON, Aurora F.; CA; Ph.D. Plant Pathology; University of the Philippines Los Baños; February 1-March 2003; June 1-30, 2003.
- PLADIO, Louisa P.; CAS, Ph.D.; Tsukuba University, Japan; June 2003-May 2004

#### Faculty granted Thesis Assistance, as of December 2003

- > DEPONIO, Christopher P.; CA; MS Horti;
- TAGARINO, Leopoldo N.; CA; MS Agribusiness
- BALAOING, Jose G.; CA; Ph.D. Agronomy
- KUDAN, Silvestre L.; CA; Ph.D. Horticulture
- WALSIYEN, Myrna B.; CA; Ph.D. Animal Science

## Faculty on sabbatical and rest and recreation leave privilege as of December 2003

- > COTIWAN, Luisa C.; CAS; To write a manual on English; June 2003-May 2004
- MANGAOANG, Julita J.; CN; Recreation leave privilege; July 2003-July 2004
- MERESTELA, Tessie M.; CA; To write a compendium of Undergraduate Thesis for Soil Science and Abstract Bibliography of Researches on Bio and Organic Fertilizers; July 2003-May 2004.
- UNTALAN, Paquito P.; CF; To write a lecture manual "An introduction to Watershed Management"; June 1003 – May 2004.

#### Faculty who attended international trainings/conferences/workshops

- AOAS, Epifania G.; International Symposia on Food and Nutrition Planning at UP Los Baños; June 24-28, 2003
- A BAWANG, Franklin G.; Intensive and Sustainable Vegetable Production System, Israel; Jan 20-Feb 12, 2003
- BAYANGAN, Evelyn; Problem Solving in Management at Seoul, South Korea; Sept 15-26, 2003
- BATANI, Ruth.S.; Expert Seminar on Treaties, Agreements and Constructive Arrangement between States and Indigenous Peoples, Geneva, Switzerland; Dec 15-17,2003
- BELIGAN, Salvacion Z.; Netcourse in STATA, Internet STATA Corporation, Texas; Sept 12-Oct 24, A 2003
- D CASTRENCE, Anatalia V.; World Small Animal Veterinary Association (WSAVA), Thailand; October 23-27, 2003
- DEGAY, Imelda O.; Food and Nutrition Program Planning and Management at UPLB and Thailand; A Oct 2002- Jan 2003
- A DOMONDON, Denisa L.; Biodiversity Conservation in Desert Ecosystem at Sede Boker Israel; May 4-30, 2003
- FERNANDO, Sheryl I.; InfoComm Asia 2003 at Suntec City, Singapore; Oct 29-21, 2003
- LUBRICA, Percyveranda A.; Distance Learning, Israel

During the year, some members of the faculty left the portals of the University due to old age and by choice. At the same time new members were recruited to fill in

the positions. The members of faculty who retired are and those who were just hired in 2003 are listed below.

#### **Faculty Retirees**

- BASIL, Virginia B. Professor III, CTE, April 1, 2003
- A BILANGO, Gregorio G., Associate Prof V, CTE, August 1, 2003
- CAWAON, Florence C., Associate Prof V, CN, September 1, 2003 A
- A PAATAN, Esther B., Asst. Prof IV, CTE, August 1, 2003
- A PASCUA, Remedios C., Asst. Prof. IV, CAS, November 1, 2003
- A RAMOS, Charito A., Asst. Prof IV, CAS, June 1, 2003
- A TUMBAGA, Victoria D., Asst. Prof. IV, CHET, November 1, 2003
- VILLANUEVA, Thelma G. Associate Prof IV, CAS, November 1, 2003

#### **New Faculty Recruits**

SAGALLA, Esther Josephine D.; Instructor CA; BSA Agronomy; January 15, 2003

## Accreditation

The College of Teacher Education its doctorate and master submitted programs for the Preliminary Survery to the AACCUP last January 20-24,2003, It was subsequently granted a candidate status. Specifically, the degrees included were PhD

in Agricultural Education and Educational Management, MS in Agricultural Education, and MA Education in Administration and Supervision, Elementary Education and Guidance and Counseling.

COLLEGE	PROGRAMS/ LEVEL	OF SURVEY	VALIDITY OF THE LAST ACCREDITATION	STATUS
College of Agriculture	BSA (all majors) BSAB Level II	1 <sup>st</sup> Resurvey, March 1999	March 14, 1999 - March 13, 2004	Reaccredited
College of Arts and Science	BS Applied Statistics Level II	2 <sup>nd</sup> Resurvey, Jan 22-24, 2003	Dec. 11, 2002 - Jan. 2004	Reaccredited
College of Agric'l Engineering	BS Agric'l Eng'g Level II	1 <sup>st</sup> Resurvey, Jan. 20-22,2003	Jan. 7, 2002 – July 2004	Reaccredited
College of Forestry	BS Forestry Level II	1 <sup>st</sup> Resurvey, Jan. 23-25, 2003	Jan, 7, 2002 – July 2004	Reaccredited
College of Home Economics and Technology	BS Nutrition Level II	1 <sup>st</sup> Resurvey, Jan. 23-25, 2003	March 4, 1001 – March 13, 2006	Reaccredited
College of Nursing	BS Nursing Level II	1 <sup>st</sup> Resurvey, Nov. 1999	Nov. 18, 1999 – Nov. 17, 2004	Reaccredited
College of Teacher Education	B in Elem. Educ. B in Sec. Educ. BS Agric'l Educ Level II	1 <sup>st</sup> Resurvey, Nov. 1999	Nov. 18, 1999 – Nov. 17, 2004	Reaccredited
College of Veterinary Medicine	Doctor of Vet Med Level II TPAE* – 86% Compliance	1 <sup>st</sup> Resurvey Nov. 1999	March 14, 1999 – March 14, 2004	Reaccredited
Graduate School	MS (all majors field in Agriculture) Level II MS Resource Mgmt Level II Ph.D. Horti/RD Level II	1 <sup>st</sup> Resurvey, Dec. 6-8, 2001	Jan 2002 – Jan 2006	Reaccredited
	MAEd/Ph.D. Educ Mgmt. MSAE/Ph.D. Agric. Educ.	Preliminary Jan 23-25, 2003	Feb 1, 2003 – Jan 31, 2005	Candidate Status

# University Health Services

#### Highlights of accomplishments

- The medical-dental staff of the University was given subsistence and laundry allowances as early as January, as granted by the Magna Carta for public health workers who were disallowed by the Commission on Audit of such benefit in April 2002.
- ✓ The University hired a new dentist in July. The newly hired dentist immediately performed the dental or oral examination of students.
- ✓ The mini laboratory clinic of the medical clinic was revived in August when a faculty medical technologist was assigned to do part time job at the health unit. Routine laboratory such as CBC, tests urinalysis, Fecalysis, hemoglobin determination, blood sugar test and pregnancy test can now be done at the school clinic.
- ✓ The budgetary allocation for additional supplies and equipment for the medical-dental clinic was increased

- this year. To further beef up the much-needed supplies. medicaldental fees would be increased by next school year.
- ✓ The University has continuously received outreach services from other agencies both public and private. Late in the year the medical clinic allied itself with the Sagip Mata program of the government. representative from the said project came to the University to offer free eye check up to students and personnel.
- ✓ The free clinic of Dr. Victor G. Dumaguing visited the University four times last year. The project, a part of the BAWAS TABA DAGDAG GINHAWA program of a nongovernment agency, offers free consultation as well as free laboratory test such as electrocardiography or ECG, cholesterol and blood sugar determination as well as body mass index analysis.

# University Registrar

#### Highlights of accomplishments

- The first Operations and Systems Manual for the Office of the University Registrar, which was approved by the University Administrative Council, was prepared.
- ✓ The staff members were reassigned. based on their capability and item in the University.
- ✓ Forms needed in the office were reviewed, revised and completed.

- The first comprehensive University Academic Calendar was reviewed and prepared.
- "Lakbay Aral" for the staff was conducted.
- Enrollment procedure was reviewed and improved.
- ✓ Training needs were identified and. staff retooled.

- Encoded admission matters in BSU website thus admission and related matters can be accessed thru internet.
- ✓ The first staff member was endorsed. to go on study leave with pay.
- ✓ The University Academic Catalogue was started.

## Policies on admission, retention and related matters were reviewed.

# University Library Services

#### Salient accomplishment in 2003

- Emphasis was put on the in-depth information literacy program for all faculty, staff and students in the University. Starting 2<sup>nd</sup> semester 2003, a lecture was scheduled for faculty on the use of electronic resources. internet, and other on-line resources. This is a continuing program, until all the library users become aware of what the library can offer them in terms of electronic resources.
- ✓ With the change of leadership, the University plans were thoroughly reviewed thru a strategic planning workshop conducted towards the 3rd and 4th guarter of 2003. Hence, the library development plans were also revised.
- ✓ The BSU mini-archive and president's memorabilia where important university documents are indexed and housed were launched. Profiles of the three last presidents (Dr. Fortunato Battad,

- Dr. Lucio Victor, and Dr. Cipriano Consolacion) were displayed with their corresponding accomplishments. Together with these resources are the history local collections in the Cordillera region.
- A formal MOA was signed with the Library Link as partners in the sharing of Filipiniana resources and with Phil. Agrinet for the sharing of all agricultural resources.
- Awarded a Cirilo B Perez Award during the National Book Week Celebration by the Philippine Librarians Association.
- ✓ Acquired were: 699 books titles (559 purchases and 140 donated); 73 titles of periodicals - 73 titles (20 were subscription, 20 gifts and 13 exchange) and two electronic titles.

# Open University

#### Vision:

To provide quality education and training accessible to all using both nonformal and formal learning system independent and out-of-school youth programs particularly those that respond to community needs.

#### Mission:

The Benguet State University Open University is committed to offer courses to relevant education in both degree and non-degree programs with strong focus entrepreneurship.

#### Goals and Objectives:

- To offer non-traditional schemes of providing quality education that supports entrepreneurship and socio-economic development.
- To institutionalize a system of sustaining a community-based continuing education program supporting human resource development.
- To evolve a model of community-based kind of distance education that maximizes the full utilization of local resources in partnership with various agencies, institutions and organizations.
- To strengthen and compliment the formal curricular offerings of the university and to operationalize non-formal education agenda of academic institutions.
- To recognize and award equivalencies of courses for individuals with acquired skills, which may accrue to a higher or equivalent degree.

#### Curricular Program:

- Master in Urban Management
- > Master in Human Resource Development
- Master in Nonformal Education
- Master in Community Development
- > Master in Development Communication
- Master in Cooperative Management
- > Diploma in Urban Management
- > Diploma in Training Management

#### Enrolment and graduates in the different degree program of the Open University

DEGREEE COURSE	ENROL	GRADUATES	
	2002 - 2003	2003 -2004	2003
Master in Community Development	64	51	3
Master in Human Resource Development	53	62	6
Master in Development Communication	17	33	2
Master in Cooperative Management	29	25	-
Master in Non-Formal Education	21	28	1
Diploma and Master in Urban Management	12	25	2
Diploma in Training Management	29	25	3
TOTAL	225	248	17

#### **Highlights of Accomplishments**

- The BSU Open University Distance Education program continues to provide access to higher education. The students come from the far-flung areas of Apayao, Kalinga, Ifugao, Benguet, Mountain Province, Nueva Ecija, Nueva Viscaya, La Union, Ilocos Province, Bulacan and Laoag City.
- For the five master's degree and two diploma courses 248 enrolled and 17 graduated last March 2003.
- ➤ The brochures of the courses offered in both the degree program and diploma courses were updated. The description of each degree and each course under each degree was given its proper scope to guide instructors and students on the

- expected knowledge, skills and attitudes to be derived from taking the course.
- > The policies and operational guidelines were prepared and finalized.
- Records of students were updated to conform with present guidelines from the Office of University Registrar.
- Faculty updating on Open University Distance Education policies from CHED were conducted through two seminars, which were attended by the Graduate School Dean, and College Secretary, and the Executive Coordinator of BSU Open University.
- A new computer was acquired and its supplies adequately provided from the Trust Fund.

# Center of Excellence in Agriculture Education

Benguet State University is one of only six Centers of Excellence in Agriculture Education identified by the Commission on Higher Education across the country. The Center of Excellence status is in recognition of the strengths and potentials of an institution or a sector in the institution in terms of faculty, facilities and curricular programs.

Almost 75% of the amount has already been used in the different components most especially for the upgrading of facilities and conference attendance. Faculty members from the College of Agriculture and other colleges as well have availed themselves of COE funding support in conference attendance.

Components of the COE project and their allocat	ion
COMPONENT	ALLOCATION
Faculty & Staff Development	P 267,000
Upgrading of Facilities	1,623,000
Upgrading of Library Holdings & Facilities	175,000
Curricular Development	90,000
Faculty Exchange	60,000
Professorial Chair & Outstanding Teacher Award	36,000
Production of Teaching Materials	200,000
Research Awards (faculty & student)	90,000
Publication Incentives	45,000
Paper Presentation & Conference Attendance	240,000
Contingency	150,000
TOTAL	P3,000,000

# RESEARCH, DEVELOPMENT AND EXTENSION

The year 2003 was marked with awards for achievements as well as significant and relevant initiatives in research, development, and extension.

The significant technologies and information generated were offshoots of continuing research, development and extension activities of the University. They relate to crop improvement, crop management, crop protection, postharvest, marketing, animal production and policy studies.

During this year, a sweetpotato variety, named BSU SPO2 or 'Bengueta', was released for dissemination. This variety performs well both under highland and lowland conditions and has good processing qualities. Seven organisms were developed and ready for piloting as bio-control for chrysanthemum diseases. Promising varieties of potato and garden pea were identified to be resistant to leafminer and other diseases. Varietal/clones selections of potato and yam, with potentials of processing and disease resistance, were maintained.

Extension activities were aired through a regular radio program, Research and extension personnel and some faculty members of the different colleges in the University aired a wide array of topics such as crops and live stock production, food processing, and

health issues like nutrition and management of human diseases, disaster management and preparation.

Training and outreach programs focused on crop production, postharvest/ processing and marketing. Furthermore, on-field participatory researches with farmers/ cooperators

The BSU Research Journal. RANGTAY and the RDE Forum, a new publication, that features scientific papers (lectures presented/delivered in conferences, conventions and seminarworkshops), were published during the vear.

Other technical printed materials were produced in popular form. Instructional Educational and Communication (IEC) materials such as leaflets, pamphlets, and posters were widely distributed to various clientele.

To provide continuing education to the RDE personnel, staff members were sent to different local, national, and international training courses, seminars and workshops.

The University's RDE programs greatly enhanced through partnership and institutional linkages with local, national and international governnon-government and cies/organizations.

# Technologies/ Significant Information Generated

From the completed and ongoing research and development activities, the following information were generated as of the year 2003.

#### A. Crop Improvement

1. Northern Philippine Rootcrops Research and Training Center found that 30 potato varieties/ clones have potentials for processing and are disease resistant. Of these varieties five are maintained in in-vitro, 30 are being evaluated for stem cutting production, 27 are being evaluated on yield trials, and seven are in advance yield trials.



2. /P80047 and 13.8.1 are promising potato clones They are moderately resistant to late blight and leafminer, and have higher tuber yield and higher dry matter content as compared to Granola and Igorota.



- 3. For open field seed production of potato, the pea-sized Generation O (GO) tubers of Igorota variety produced bigger and more number of Generation 1 (GI) seed tubers than Granola.
- 4. On sweetpotato varieties/entries. 155 were maintained (ex-situ) in the field and laboratory: 10 in the in-vitro: 20 were evaluated under the National Cooperative Testing (NCT) trials and 35 are under drought tolerance trials. were under mass propagated for processing and product innovation trials.
- The BSU SPO2 sweetpotato variety, named 'Bengueta', was approved by the National Seed Industry Council (NSIC) for national release.
- entries. 6. Three sweetpotato Tagalog, Comiles and PSBSP-17, have high yields under highland conditions.
- 7. The application of 14-14-14 + chicken manure and alnus compost significantly increased the yield of Arabica coffee berries to as high as 4.97 kilograms per tree.



### C. Crop Protection

- Two bacterial antagonists, Falbobacterium sp. and Pseudomonas.sp., and one fungal hyperparasites, Verticillium sp., are ready for piloting as bio-control for chrysanthemum diseases in farmers' field.
- On garden pea, cultivar Melting Sugar showed a degree of resistance to leafminer. Trigard 75 WP and Dimotrin 30 SC were effective in controlling leafminer. Yellow sticky trap and intercropping "Kutsai" with garden pea can also reduce leafminer infestation.
- 3. Trichoderma as biocontrol agentminimizes clubroot severity of cabbage by suppressing the growth of *Plasmodiophera brassicae*. It increases yield when combined with lime. As compost activator it increases soil pH and enhances nutrient uptake.

4. Vegetable diseases were documented on colored photographs. The symptoms were described and the causal organisms identified. With this compendium, farmers can immediately determine the disease attacking their crops, and thus, institute the appropriate management measure.



5. Five potential biological control species for vegetable diseases were isolated and identified. These are: Bacillus, Penicillium, Pseudomonas, Trichoderma and Paecilomyces.

6. The insect pests initially identified to be associated with coffee Arabica and Excelsa in the Cordillera were leafminers, scale insects, chryso melid larvae, lycaenid larvae, twig/stem borer. berry borer and psocoptera.



- 7. Fungicides Daconil 2787 and Dithane M45 were less toxic to Diadegma, a biocontrol for diamond back-moth in cabbage production.
- 8. The municipalities of Kibungan, Bakun, Buguias, Kabayan, Kibungan and Mankayan were identified as chayote growing areas in Benguet. The municipality of Kibungan had the widest area. highest production and gross sale. The incidence of chayote mosaic tymovirus ranged from low-mild to mild-moderate in the municipalities of Bakun, Buguias, Kabayan, Kibungan Mankayan. The infection of tymovirus greatly reduced vine length and yield of chayote.

## D. Postharvest, Processing and Marketing

- 1. Haponica, a yam variety, was found suitable for yam 'haleya' delicacy and for wine making.
- 2. A total of 1-2% of anthocyanin can be recovered from the processing waste of yam (peelings and cooking water). Anthocyanin is used for food coloring and dye.
- 3. A total of 20-50% loss in yam was documented to be the result of injuries, bruises, diseases and weight loss during post-harvest handling and processing.
- 4. Six tons of yam powder was produced from the pilot commercial yam processing; two tons were disposed for promotional sales and chemical analysis; and the remaining four tons were used for storage trials and product development. Proceeds were remitted to the financier (TAEONE, A Korean investor) as part of the development cost recovery. The promotional sales indicated that the product is acceptable to the market; however, there is a need to secure Bureau of Food and Drug permit for commercialization.
- 5. Post-harvest loss could be as high as 12% in cabbage and 'wongbok' as documented from farmers' field to the Vegetable Trading Post in La Trinidad, Benguet.
- 6. Cabbages and beans have a shelf-life of five days under ambient conditions. Refrigeration prolongs harvest quality up to 12 days.

#### E. Animal Production

1. Rabbit production in the animal production component of the agroforestry farming system has a great potential. This system entails less commercial feeds in maintaining rabbits. Grasses and succulent weeds are available as feed supplement. This was observed on the case of ten female rabbits (New Zealand White) and two male rabbits (New Zealand White and Chinchilla) raised at the Livestock R and D Farm at the Ampasit Agroforestry Project.



- 2. Non-pathogen streptococci, s. dysgalactiae, and Enterococcus faecalis were isolated. Isolation of E. faecalis indicates fecal contamination of carcass probably during handling or from dust contamination of carcasses. E. faecalis can cause endocarditis and wound infection in man but not in pigs. Streptococci dysgalactiae were sensitive to Penicillin G. and Tetracylclines. Ampicillin These antibiotics are therefore recommended for the treatment and control of infections in animals.
- 3. Samples of mesenteric lymph nodes from pigs slaughtered and/or sold in Benguet and Ba-

guio were examined for the presence of Salmonella. Twelve out of 120 samples were found Salmonella positive. Being potentially pathogenic to man Salmonella should be absent in any meat product.

#### F. Silkworm Project

 In silkworm trials, 240,000 third instars of bivoltine purebred silkworm larvae (J102 and C102) were reared in 12 boxes. All these silkworm strains exhibit quality performance in relation to cocoon and silk characteristics



The mulberry production farm was expanded from 1.5 hectares to 2.5 hectares. The dominant mulberry varieties planted were Batac and Alfonso. A 1,000 square meter germplasm collection area is being maintained for

the different mulberry collections: Kurang, King, S-54, Hakikalu, Brazil, Taiwan and other Japanese. Korean and Chinese mulberry varieties.

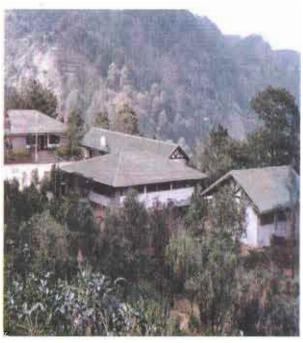


#### G. Social Researches

- 1. Technology **Syntheses** Rice. On Rice Key Commodity Systems (KCS) the best component of rice practices and technologies have been synthesized in the provinces of Benguet, Kalinga and Mt. Province. The synthesized rice-based KCS for Ifugao Province were packaged. On farm and on enterprise trials of synthesized rice-based KCS technologies for the low, medium, and high elevation ecological zones have been established in Ifugao province. Farmers' Field Schools (FFS) were held particularly in the municipalities of Lamut, Kiangan, Banaue, and Lagawe. FFS were mobilized in Alfonso Lista and Lamut.
- 2. Biodiversity Centrum. A biodiversity centrum was proposed to be located on a 35 hectare forested area in Ampasit, Wangal,

La Trinidad, Benguet. It was envisioned that the centrum would showcase the following: bambusetum, butterfly garden of pine and indigenous trees, organic farms, animal farms, aviary, apiary, techno park, and other recreational areas.

The proposed "BSU Natures Park" was evaluated for its socio-economic value. It was also evaluated for its potential as a tourist destination and for its economic returns. It was estimated that proposed park could generate as much P2,108,693,560 based on survey of potential tourists/visitors.



3. Vegetable Importation. The study, entitled "Perceived Effects of Vegetable Importation on Cordillera Vegetable Farming" was conducted to find out the effects of open vegetable importation on farming activities in the Cordillera. Over 600 farmers from selected vegetable growing areas of Benguet and Mt. Province,

Cordillera Administrative Region (CAR) were the respondents. Eighty percent of the respondents perceived that the cause of low prices of vegetables is the presence of imported vegetables and 20.7% of the respondents perceived that middlemen and/ or buyers/traders took advantage of the importation issue by lowering the price/kilogram of local vegetables.



# Programs/projects implemented

In the year under review, different researches were undertaken by the four research centers and institutes of the University. Some outside funded developmental projects were classified under the special projects and other basic and social researches under the College-based projects. Most of the programs/projects have a duration of five or more years; however, partial and initial results were reflected on the significant information generated.





TITLE	DATE		BUDGET	FUND SOURCE/S	OTHER
	Start	End	BUDGET	SOURCEIS	AGENCIES
Horticultural Research and Training Institute (HORTI)					
Tissue Culture Research and Development Program for Highland Crops	1995	2005	2,046,880 1,200,000	BSU PIUC	LGUs/SLU/VLIR
Integrated Pest Management (IPM) on Selected Vegetable Crops	1998	2005	2,260,608	BSU	BPI/LGUs
Strawberry Varietal Development Program	1998	2005	1,483,454 260,344	BSU Builder Rural Bank	LGUs
Collection, Introduction of New Varieties of Roses under Benguet Condition	2001	2004	782,072	BSU	LGUs
Chayote Research and Development Project Study Titles:  Chayote Growing in Benguet Province  Effect of Chayote Mosaic Tymovirus (CMTV) on the Growth and Yield of Chayote	1999	2004	1,819,284 290,000	BSU DA-BAR	UPLB
Development of Market-Oriented Cropping Schemes for Vegetable Crops Study Titles:  • Vegetable Succession Cropping Schemes • Off-season Vegetable Cultivation	1996	2004	3,386,052	BSU	DA LGUs
Postharvest Handling, Processing and Product Development of Highland Vegetables	2001	2005	1,275,335	BSU	LGUs
Cordillera Indigenous Mushroom and Truffles	2001	2004	491,256	BSU	LGUs
Stress Management in Sub-tropical Vegetable Crop Cultivation	2003	2007	1,896,140	BSU	LGUs
Fungal Hyperparasites and Bacterial Antagonists as Component of Integrated Disease Management Pro- gram for Chrysanthemum White Rust	Oct. 1999	Jan. 2004	1,826,528	DA-BAR	LGUs UPLB
Biological Control of major Soil-borne Diseases Af- fecting Selected Highland Crops Using Bacterial and Fungal Antagonists and Plant Extracts	2001	2003	600,000	DA-BAR	LGUs
Program Title: Biological Control of Phytophagus Mites and Aphids in Selected Crops in the Cordillera Project title: Establishment of mass Rearing Center on Predatory Mites to Manage Mite Pests on Strawberry	1999	2005	588,000 700,000	DA-CARFU (CO) LGU, La Trinidad	LGUs
And Roses  Varietal Improvement of Highland Vegetable Crops  Study 1 Development and Piloting of Improved Varieties of Garden Pea  Study 2 Development and Evaluation of Snap Bean (Phaseolus vulgaris) Cultivars for the Philippine Highlands  Study 3 Tomato Hybrid Development and Seed Increase  Study 4 Pepper Hybridization  Study 5 Zucchini Hybridization  Study 6 Squash Varietal Improvement	1999	2004	436,303	UPLB-IPB	DA-BAR

TITLE	DATE		BUDGET	FUND SOURCE/S	OTHER AGENCIES
IIILE	Start	End	DODGET	333,023	INVOLVED
Establishment of Mass Rearing Center on Predatory Mites to Manage Mite Pests on Strawberry, Roses and other High Value Crops	Aug. 2001	July 2004	2,400,416	DA-CAR	LGU, La Trini- dad
Survey and Identification of Soil-borne Plant pathogen in Mt. Province	Oct. 2001	2003	503,000	CHARMP	DA-CAR
Diseases of Vegetable Crops with Economic Importance in the Cordillera: A Compendium	Oct. 2001	2003	518,600	CHARMP	DA-CAR
Integrated Highland Farming Systems and Agro- forestry (IHFSA)					543
Program 1. Ten Year Arabica Coffee Rehabilitation Program in the Cordillera	1999	2009	-1/4/2		DA-CAR Farmer partners LGUs
Project 1. Production Technology Improvement of Arabica Coffee in CAR	1999	2009	4,283,370	BSU	DA-CAR Farmer partners LGUs
Study 1 Performance of Arabica Coffee under Different Rejuvenation Techniques					
Study 2 Evaluation of Different no. of Vertical Shoots on Bended Old Arabica Coffee Trees for Maximum Yield					
Study 3 Collection, Selection, Evaluation and Multiplication of Arabica Coffee Strains					
Study 4 Integration of Beekeeping in Coffee- Based Farming System					
Project 2 Crop Protection Studies on Arabica Coffee	2003	2009	1,818,468	BSU	LGUs Farmers
Study 1 Survey and Identification of Arabica Coffee Diseases				lie	
Study 2 Influence of Cropping Systems on the incidence of Arabica Coffee Diseases					
Study 3 Fungicidal Screening Against Major Fungus Diseases of Arabica Coffee					
Study 4 Management of Postharvest Diseases of Arabica Coffee			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
Study 5 Survey and Identification of Insect Pests Attacking Arabica Coffee					
Study 6 Screening of Insecticides Against Major Insect Pests of Arabica Coffee					
Study 7 Survey and Identification of Weeds Associated with Arabica Coffee					
Study 8 Screening of Herbicides on Weeds Associated with Arabica Coffee					-
Project 3 . Soil Management and Fertilizer Studies for Arabica Coffee Production	2002	2009	2,403,736	BSU	Farmer partners LGUs
Study 1 Response of Arabica to Different Organic Fertilizers Subjected to Rejuvenation through Bending in a Coffee-pine Agro- forestry System					
Study 2 Response of Arabica Coffee to Different Organic Fertilizers Subjected to Rejuvenation through Topping					,

TITLE	DATE		BUDGET	FUND SOURCE/S	OTHER AGENCIES
	Start	End	DODGET		INVOLVED
in a Coffee-pine Agroforestry System					
Study 3 Effect of Inorganic and Organic Fertilizer Formulations on the Growth and Yield of Arabica Coffee					
Study 4 Response of Arabica Coffee to Selected Micronutrients and Foliar Fertilizers					
Study 5 Integrated Plant Nutrition Management System for Organic Arabica Coffee Production					
Project II. Integration/Evaluation of Livestock and poultry for Agroforestry System in the Highlands	1999	2005	2,040,618	BSU	DA LGUs
Study 1 Rabbit Production as Component of Agro- forestry					25-37GV70.4
Study 2 Native and Hybrid Chicken as Component of Agroforestry					
Study 3 Geese Production as Component of Agro- forestry		500		Sec. 3421-94	
Study 4 Turkey Production as Component of Agroforestry					
Project III. Isolation and Antibiotic Sensitivity Testing Of pathogenic Microorganisms of Swine	2000	2003	500,364	BSU	NMC LGUs
Study 2 Isolation of Salmonella in Swine					
Study 4 Pathogenicity Testing of Salmonella Isolates					
Project IV. Management of Diseases in Organically -Grown Vegetables	2000	2003	1,435,288	BSU	ВІОТЕСН
Study 1 Isolation and Identification of Potential Antagonists from Various Compost and Rhizosphere Soil					
Study 2 Greenhouse Evaluation of Bacterial Isolate and Trichoderma Strain KA against Clubroot in Cabbage					
Study 3 Field Evaluation of Trichoderma Against Clubroot in Cabbage					
Project V. Highland Pig Conservation and Development Project	2003	2007	1,941,060	BSU	DA LGUs
Study 1 Establishment of native Pig Nucleus Herd					
Study 2 Breeding for Cordillera Highland Pig Study 3 Multiplication and Distribution of CHIP					
Strain Project VI. Indigenous Knowledge on Animal	2003	2005	1,398,321	POL	DA
Health and Production in the Highlands Study 1 Local Knowledge Systems on Swine	2300	2000	1,000,021	BSU	
Health and production Study 2 Local Knowledge Systems on				1155	
Ruminant Health and Production Study 3 Local Knowledge Systems on Poultry				7 6 9	
Health and production Study 4 Establishment of Medicinal Plants Garden		- Vivi			

TITLE	DATE		BUDGET	FUND SOURCE/S	OTHER
	Start	End	BUDGET	SOURCEIS	AGENCIES INVOLVED
Institute of Social Research and Development (ISRD)			5 10 100		
Community Agriculture-based Livelihood Enhance- ment (CABLE) Program Study Title: Socio-economic Survey of Pudong, Kapangan, Benguet	2003	2004	1,219.586 50,000	BSU PIUC	LGUs Farmer Coop- eratives
Perceived Effects of Vegetable Importation to Cordillera Vegetable Farming	Jan. 2003	Dec. 2003	86,051 150,000	BSU PIUC	LGUs DA
Assessment of Philippine Agricultural Research Development Extension	Jan. 2003	March 2003	500,221	JICA	BSU
Northern Philippines Root Crops Research and Training Center (NPRCERC)  I. POTATO RDE					
Improvement of the Potato Seed Production Technology in the Philippines	2001	2004	3,000,000 1,460,000	DA-BAR BSU	NOMIARC LGUs Reg. 10 FarmerCoops
Variety improvement for processing and table potatoes in the Philippine highlands	1995	2005	1,800,000	BSU	DA-BAR Farmers
Improvement of the Potato Seed Production Technology in the Philippines	April 2001	March 2004	867,100	DA-BAR	LGUs
Strengthening the Potato RDE Network	2000	2005	500,000	DA-BAR	DA PCARRD
Contribution of Rootcrop Production, Processing and Consumption to Income and Nutrition of Selected Households and Consumer Groups  II. SWEETPOTATO RDE	2001	2005	1,200,000	NHF	LGUs
Varietal Evaluation of Sweetpotato in the Philippine Highlands	2000	2005	292,000 1,900,000	Philroots BSU	PRCRTC-VisCA UPLB-IPB
Sweetpotato Enterprise Development in Partnership with Growers and Processors	1998	2004	2,220,000	BSU	UPWARD
Varietal Improvement of Sweetpotato in the Philippines	1999	2004	90,900	VISCA	UPWARD
Potato and Sweetpotato Livelihood Project for the Lowlands of Northern Luzon	June 2002	May 2003	286,348 92,417	CIP- UPWARD LGU	LGUs Farmer Coops
Assessing Market Potential of the Sweetpotato Snackfood Products	2001	2003	35,000	NHF	UPWARD
Varietal Evaluation of Sweetpotato in the Highlands	1999	2004	70,000	VISCA	LGUs
Evaluation of a Participatory Nutrition Promotion Strategy	Marc h 2003	Aprik 2004	600,000	NHF	LGUs
III. YAM RDE	2001	2006	600,000	TAEONE	Former Cr.
Project 1. Varietal Evaluation of Yam and Northern Luzon	2001	2000	1,250,000	BSU	Farmer Coopera- tors PRCRTC-VISCA
Project 2 . Sustainable Yam Seed Production in CAR	2002	2006	1,080,000	BSU	PRCRTC- VISCA
Project 3. Participatory Technology Innovation for Yam Production	2002	2006	1,080,000	BSU	PRCRTC- VISCA
Project 4. Development of Appropriate Post-	2001	2004	500,000	TAEONE	PRCRTC-

TITLE	DATE		BUDGET	FUND SOURCE/S	OTHER AGENCIES
	Start	End	BUDGET	SOUNCEIS	INVOLVED
harvest Studies in Yam			630,000	BSU	VISCA
Project 5. Product Development on the Use of Yam Flour and Starch	2003	2007	500,000 840,000	TAEONE BSU	PRCRTC- VISCA
Development of Highland Yam Industry for Domestic and Export Market	2001	2004	1,000,000	DA Jaeil Export- Import Trading Corp. IFS	PRCRTC- VISCA
Varietal Evaluation of Yam in Northern Luzon	2001	2006	600,000	TAE0NE	PRCRTC- VISCA
Development of Appropriate Post-harvest Studies in Yam	2001	2004	500,000	TAEONE	PRCRTC- VISCA
Product Development on the Use of Yam Flour and Starch	2003	2007	500,000	TAE0NE	PRCRTC- VISCA
Taro Variety and Product Development	2000	2004	45,000	PRCRTC- VisCA	PRCRTC- VISCA
IV. ROOTCROP-BASED FARMING SYSTEM RDE					there is a
Project 1. Germplasm Conservation and Maintenance of Rootcrops	1997	2006	6,480,000	BSU	PCARRD
Project 2. Integrated Pest Management on Rootcrops	2003	2006	660,000		Farmer Coops, LGUs
Project 3. Integrated Crop, Soil and Water  Management on Rootcrop Production	2003	2008	1,350,000		LGUs
Project 4. Product Development of Taro, Cassava and Other Indigenous Rootcrops In Northern Luzon	2002	2005	810,000		LGUs Farmer Coops
Project 5. Contribution of Rootcrop Production, Processing and Consumption to Income and Nutrition of Selected Households and Consumer Groups	2001	2005	1,200,000 1,600,000	NHF BSU	UPWÄRD
SPECIAL PROJECTS					
Rice-based Key Commodity System (KCS) Technology Transfer Start-up Project for the Cordillera	Aug. 1999	Aug. 2004	3,452,610	DA-BAR	PhilRice
Rice Research in Cool Elevated Areas in CAR	1990	2005	127,020	PhilRice	LGUs
Comprehensive Irrigation Research and Development Umbrella Program (CIRDUP)	Aug. 1998	Dec. 2003	4,884,170	DA – CARFU	UPLBFI ,RFU SUC. LGUs
The Productivity Improvement and Evaluation of the Agri-tourism Function of the Ifugao Rice Terraces: A Case Study	Aug. 1999	Sept. 2003	50,000	BSWM	LGUs DA-CAR
Towards In-land Aquatic Propagation in Asin (TILA-PIA)	Oct. 1998	Oct. 2003	100,571	BFAR-CAR	BENECO DMMMSU- NLAMRD Farmer
Cordillera Highland Integrated Water Resources Management (CHINWAREM) Project	May 2001	April 2007	820,260 50,000 25,000 40,000 28,495	DOST- PCAMRD CAR-DA BFAR POPCOM- DOST	DA-CAR LGUs
Project Benefit Monitoring and Evaluation of the Cor- dillera Highland Agricultural Resources Management Project (CHARMP)	Jan. 2002	May 2003	1,705,000	DA- CHARM	ADB

TITLE		ATE BUDGET		FUND SOURCE/S	OTHER AGENCIES	
LOS MAIN	Start End			I SCALE CONTRACTOR	INVOLVED	
Efficacy of Cartap 50 SP for the Control of Potato Leafminer	Feb. 2001	Feb. 2003	42,000	LEADS AGRO Phil Inc.	LGUs BSU	
COLLEGE BASED-PROJECTS					COLLEGES	
Tracer Study of BSU Graduates					CAS	
Rabies Prevention and Control in La Trinidad	TOTALL				CVM	
Demo-farm in Improving Cucumber Production in Acidic Soil					CA	
Reproductive Health Care Program					CN	
Compendium of Insect Pests and Diseases				CHARMP- DA	CA	
Inventory of Ethno Food Processing Technologies in the Cordillera Region					CHET	
A Physics Approach to Surface Water Pollution Mod- eling Using Geographic Information System					CF	
Microtechniques in Biological Science	-				CAS	
Use of Pesticides and Fertilizers in Agriculture and Its Implications for Human Health and the Environment in Kapangan, Benguet	U O				CA	
Production of Salad Crops Using Varying Rates of Formulated Organic Fertilizer under Protected Envi- ronment and Open Field					CA	
Gene Banking and Diversity Analysis of Indigenous Agronomic Crops in Benguet	Phi			PIUC	CA	

## Extension Services

There were four banner programs for CY 2003, namely, BSU on the Air, Quick Response Service, Training and Outreach, Technology Demonstration Farm and other extension activities.

- BSU on the Air a program of the University, disseminates information through the Mt. Province Broadcasting Corporation Station DZWT every 5:30 to 5:45 am. A wide array of lectures were aired on the following aspects:
  - Crops and livestock production (includes crop management, pest control and post-harvest handling)
  - Food processing
  - Health issues (nutrition and management of human diseases)

- Support systems such as cooperatives, financial and disaster management
- BSU Quick Response Service (QRS). The QRS of the University responded to the call of the Municipality of Kabayan for the control management of earthworm (bileg) in rice paddies in Adaoay, Kabayan, Benguet from Aug 2002 to May 2003 in coordination with the Municipal Agriculture Office of Kabavan. Control trials showed that Neem leaves have potentials in controlling earthworms in rice paddies. Cauliflower as rotation crop after rice increases the ROI to 150%. Four new hybrid rice varieties were also introduced for evaluation of their resistance to earthworm.

On-site techno-transfer training and demonstration on the rejuvenation of coffee and rooting methods of mountain tea (gipas) were done in Lusod, Kabayan with the coordination of DAR-Benguet, DTI and Office the Provincial Agriculturist-Benguet. The project started August, 2003 and will continue up to August, 2004.

- Training and Outreach programs. The following training and outreach activities services were also done on call basis:
  - Organic Farming Training on organic farming was done after the open forum on the existing status of vegetable industry in the locality on March 20, 2003. This activity coordinated with LGU-Buguias and DAR.
  - Training Seminar on Postharvest Technologies Marketing of Chrysanthemum and Roses. The participants were trained on recent research results on post-harvest handling and use of new packaging materials on September 19, 2003. This activity was coordinated with Postharvest Research and Training Center (PHRTC).
  - Mushroom Production. The University gave training on mushroom production to selected farmers in Benguet and nearby provinces with the support of the Shountog Foundation.

- Technology Demonstration Farms. The updates on the Technology demonstration farms established by the University are as follows:
  - A. Participatory Technology Adoption Projects

Agro-forestry demofarms. Three demo-farms that were established with three farmer cooperators in Ambongdolan, Tublay; Banengbeng, Sablan; and Gaswiling, Kapangan, Benquet. Each cooperator was given seedlings of G-melina, mahogany, rambutan, and oranges. Results show that the survival rates of the seedlings planted by the cooperators in Tublay and Sablan range from 59% to 83%, and the plants are doing well. Those planted in Kapangan have slow growth because of disease incidence and poor soil. The project was supported by with a funding of 21,950.00 from Cordillera Highland Agricultural Resource Management Project (CHARMP),

Passion fruit production using kniffin trellis. This is an ongoing project with two farmer cooperators in Upper Abiang, Atok. Benguet. As of this year, two farmer-cooperators are still beginning to recover their expenses. This project was supported by a fund of ₱26,840 from the Cordillera Highland Agricultural Resource Management Program (CHARMP).

Old coffee tree rejuvenation project. The same farmer cooperators of the passion fruit production technology were tapped for this project. So far, 71 old Arabica coffee trees were pruned. On the second year, 66 of the rejuvenated coffee trees were burned by flames from dried grasses around them. However, 45 again rejuvenated. Branches were thinned to maintain the quality of coffee berries. The project was supported by CHARMP with an amount of P16,920.00.

Chayote virus control through intensive organic fertilization. This project was established in Taloy Sur, Tuba, Benguet. The extension workers of the University demonstrated the proper and intensive use of compost as fertilizers for chayote. The demonstration also served as a trial for minimizing chayote virus. This project was assisted by CHARMP with an amount of \$\bigsim 17,256.00\$.

- PLASTRO and KOICA demo B. greenhouses. This greenhouse technology was introduced by a private company. Produced in the greenhouse are chrysanthemums and strawberries. The project produced chrysanthemum flowers from 160m<sup>2</sup> area. From the clean strawberry runners (Sweet Charlie variety) produced, 37,750 runners were distributed to strawberry growers in La Trinidad in coordination with the LGU of La Trinidad.
- C. Piloting of commerciable strawberry technologies. This pilot project was established at the BSU experimental field using commerciable technologies on strawberry production such as the use of runners as planting materials; use of planting materials grown from high elevation; use of drip and sprinkler irrigation system; and use of runners stored in cold storage. Still on-going, this project is supported by a \$\bigsep\$150,000 funding from Land Bank-Technology Piloting Center (LB-TPC).



#### Other Extension Activities

- A Community Agriculture-based Livelihood Enhancement (CA-BLE) project was implemented in Kapangan, Benguet through the Department of Agricultural Economics and Agribusiness Management. Technologies related to livelihood development such as cooperative appreciation, live-stock raising, beekeeping, etc. are continuously being disseminated through seminars and hands-on lectures. This project is still on-going and being done in partnership with Saint Louis University and LGU Kapangan.
- A research project on the farming activities of farmer Field School graduates in Bokod and Kabayan, Benguet was organized with the faculty of the BSU-Bokod Campus in partnership with the Institute of Highland Farming Systems and Agroforestry (IHFSA) and Agricultural Training Institute-CAR. This is being done to strengthen the research program of the BSU-Bokod Campus.



- Neys-van Hoogstraten Foundation (NHF) Project. This was a follow-up action research on the contribution of sweetpotato to income and nutrition by the Northern Philippines Rootcrops Research and Training Center in collaboration with Wageningen University, MS students, LGU's of Pico and La Trinidad and the Balili Elementary School. This project involved coming up with a baseline survey; implementing nutrition interventions to improve children's consumption of fruits, vegetables and rootcrops; and developing IEC materials.
- Through the College of Veterinary Medicine, gilt dispersal program was implemented for the Municipality of Kapangan. A total of five gilts were purchased and distributed to farmerpartners after they have signed a MOA. Rabies control campaign was implemented by conducting a seminar-workshop with barangay, municipal, provincial officials who are concerned with legislation and human health. Dog owners with rabies -positive dogs were interviewed.
- Through the College of Nursing, the Reproductive Health Care Center provided services related to reproductive health problems: pre- and post-reproductive health counseling on family planning, diabetes, pap smear screening. breast selfexamination, adolescent reproductive health and other basic health services within the locality. faculty members participated in medical missions during semestral breaks, weekends and holidays. Other health information were also

disseminated through the "BSU on the AIR" program through the DZWT ratio station.

Through the Philippines Institutional University Cooperation (PIUC) Program, a grand joint outreach was conducted in Lomon, Kapangan Open Gym on November 16, 2003. It was a joint program by the Benguet State University, Saint Louis University, and Pines City Colleges. The Institute of Social

Research and Development was responsible in the livelihood program and social/peers orientation through film showing. People from Central Barangay, Pongayan, Paykek, Labueg, Pudong, and Datacan were provided free medical and dental check-ups, and circumcision. They were also lectured on family planning, livelihood program, soil analysis.



As a part of the extension activities of the faculty members and research staff, they were tapped as resource speakers/lecturers during trainings, seminar-workshops in line with their field of specializations.

Title of Topic/Paper Presented	Title of Seminar, Workshop, Training	Venue	Duration	Sponsoring Agency	Person/s Involved
Organization of the Luzon Yam Network	The 1st Luzon Yam Conference	NPRCRTC	Dec 29-31, 2003	NPRCRTC, BSU	Violeta B. Salda
Integrated pest Management on Vegetables		Malaybalay, Bukidnon	December 17-19, 2003	FAO – UN	E.V. Cardona, Jr
Fertilizer Recommenda- tions of Some Crops under Benguet Condi- tions	Consultation Work- shop on Updating Fertilizer Recommen- dations for Rice, Corn, Other Field Grains, Fruit Trees, High Value Commercial Crops, and Root Crops	Long Beach Resort Hotel, Bauang, La Union	Dec 16-17, 2003	DA Region 1	Carlito P. Laurean
Research Proposal Formulation from Agri- cultural Technicians of CHARMP-covered Mu- nicipalities in CAR	Research Write-up, Summary and Con- clusion		November 27, 2003	ATI-CAR CHARMP	Sonwright B. Maddul
Chayote Production and Economics		Atok, Benguet	November 12, 2003	BSU	J.S. Ligat
A Keynote Speaker on a Seminar on Language Teacher Development: A Continuing Process	Teacher Development Seminar	ASIST, Lagangilang, ABRA	September 27, 2003	ASIST, Lagangilang, Abra	Gilda B. Jacalan
Management of Insect Pests of Vegetables		Kapangan, & Abatan, Benguet	Sept r 24, & Oct 2, 2003	Syngenta Phil.	E.V. Cardona, Jr.
Plant Tissue Culture		BSU	September	BSU	V.D. Alejan- dro
Integration of Rabbits and Ducks with Crop Production	Technology Dissemi- nation Conference	Hotel Tepeyac Baguio City	August 22	DA-CHARMP HARRDEC	S.B. Maddul
Pesticide Use and Han- dling		Kapangan, Benguet	August, Sept, and Nov	BSU	B.S. Ligat, C.S. Pa- gadan
Probiotics and Benefi- cial Microorganisms for Enhanced Swine Pro- duction	Technology Dissemi- nation Conference	Hotel Tepeyac Baguio City	August 22	DA-CAR HARRDEC	C.S. Battad
Soil and Water Sam- pling, Collection and Analytical Procedures	Skills Enhancement for the Promotion of Research-Based Community Extension Services	SLU	July 27	PIUC BSU SLU	Carlito P. Laurean
Floral Design and Flower Arrangement		Tuba, Ben- guet	July 31	DA CHARMP	A.G. Ladilad
Anthurium Production		Tuba, Ben-	July 29-30	DA - CHARMP	A.G. Ladilad

Title of Topic/Paper Presented	Title of Seminar, Workshop, Training	Venue	Duration	Sponsoring Agency	Person/s Involved
and Management Train- ing		guet			
Cropping Schemes and Production Economics	Seminar on crop diversification and market prospects and strategies	BSU	July 8	BSU	P.B. Alipit
Training on Propagation of Indigenous Orchids and Bonsai		Santa Fe, Nueva Vis- caya	March 26- 28	CASCADE, Kalahan Educa- tional Founda- tion, Inc	V.D. Alejan- dro
Management of Soil Insect Pests			March	BSU	B.S. Ligat
Strawberry Variety Improvement		Baguio City	March	ABS-CBN	D.P. Padua
Heat Stable Enterotoxin for Salmonella Isolates	70th Annual Convention and Scientific Conference	Bohol Tropics Resort Tagbilaran City Bohol	Feb. 19-21	Phil. Vet. Med Association	C.S. Battad
Chayote Mosaic Virus	Farmers' Seminar	Tublay, & Kibungan, Benguet	February 17 November 20	BSU	J.S. Ligat

#### **Publications**

- BSU RESEARCH JOURNAL, June-Oct 2002 (circulated)
- 2. BSU RESEARCH JOURNAL, Dec 2002 (circulated)
- 3. BSU RESEARCH JOURNAL, March 2003 (circulated)
- BSU RESEARCH JOURNAL, June 4. 2003 (circulated)
- 5. RANGTAY, Jan-June 2003 (circulated in July)
- 6. RANGTAY, July-Dec 2003 (circulated)
- VILLANUEVA, L.M. 2003. Wilt Dis-7. ease Threatens Chrysanthemum production. HARDIN. The National Ornamental Network News Update.

- Other publications: leaflets, posters, pamphlets on:
  - Sweetpotato production
  - Sweetpotato varieties
  - Sweetpotato planting materials production
  - Sweetpotato recipes
  - Contribution of sweetpotato to income & nutrition
  - Potato production (English & ilocano)
  - Nutritional situation
  - Nutritional value of common vegetables, fruits and rootcrops

## Research and Development Awards

- 1st PRIZE: RESEARCH PAPER: Survey and Identification of Soilborne Plant Pathogen by Dr. Lily Ann D. Lando; given by Highland Agriculture Resources Research and Development Consortium (HARRDEC) during the Regional Symposium at Closed Gym, BSU, La Trinidad, Benguet on August 13-14, 2003.
- 2. 2<sup>nd</sup> PRIZE: RESEARCH CATE-GORY: Assessment of the Philippine Agricultural Research, Development and Extension System by Dr. Rosana P. Mula et al.; given by Highland Agriculture Resources Research and Development Consortium (HARRDEC) during the Regional Symposium and Farmers Forum at Closed Gym, BSU, La Trinidad, Benguet on August 13-14, 2003
- 2<sup>nd</sup> PRIZE: DEVELOPMENT PA-PER: Potato and Sweetpotato Livelihood Project for the Lowlands of Northern Luzon by Prof Jocelyn C. Perez et al. given by Highland Agri-

- culture Resources Research and Development Consortium (HAR-RDEC) during the Regional Symposium and Farmers Forum at Closed Gym, BSU, La Trinidad, Benguet.
- 4. 1st PRIZE RESEARCH POSTER: Diseases of Vegetable Crops with Economic Importance in the Cordillera: A Compendium by Dr. Asuncion Nagpala and Dr. Lily Ann Lando given by Highland Agriculture Resources Research and Development Consortium (HARRDEC) during the Regional Symposium and Farmers Forum at Closed Gym, BSU La Trinidad, Benguet on August 13-14, 2003.
- BEST INSTITUTIONAL BOOTH: Given to BSU Research and Extension Services by Highland Agriculture Resources Research and Development Consortium (HARRDEC) during the Regional Symposium and Farmers Forum at Closed Gym, BSU La Trinidad, Benguet on August 13-14, 2003.

## Linkages/ Partnerships

The following institutions/ agencies were the partners of the University in propelling research development and extension endeavors in the Cordillera and nearby regions. These institutions/ organizations provided project funds, shared expertise and facilities to facilitate the conduct of research, development and extension programs of the University.

INSTITUTION	NATURE OF LINKAGE
Local	
Agricultural Training Institute-NTC	Extension Support
Allied Botanical Corporation	Variety Trial on Vegetable
BAR (Bureau of Agricultural Research)	<ul> <li>Tissue Culture Research and Development Program for Highland Crops</li> <li>Fungal Hyperparasites and Bacterial Antagonists as Component of Integrated Disease Management Program of Chrysanthemum White Rust</li> </ul>
Bataan State College (BSC)	Sweetpotato Clean Planting Material Production
Bayer Phils.	Insecticide Trial Against Leafminer of Highland Crops
BCNO (Baguio City Nutrition Office)	Women in Sweetpotato Enterprise Develop- ment in La Union Province and Baguio City, Northern Philippines
BPI-BNCRDC (Baguio National Crops Research and Development Center)	Integrated Management of Potato Leafminer
Builders Rural Bank, Inc.	Strawberry Varietal Development Program
CIP-UPWARD (International Potato Center -Users Perspectives for Workers Research and Development)	Potato and Sweetpotato Livelihood Project for the Lowlands of Northern Luzon
DA-CARFU (Department of Agriculture- Cordillera Administrative Region and Field Unit	Integrated Management of Potato Leafminer
DA-CHARMP (Department of Agriculture Cordillera Highlands Agricultural Research Management)	<ul> <li>Project Benefit Monitoring and Evaluation (PBME) of CHARMP</li> <li>Survey and Identification of Soil Borne Plant Pathogen in Mt. Province</li> </ul>
Department of Agrarian Reform (DAR)	Benguet Farmers Aduyon Center for Rural Development (BFCARD)
DMMMSU (Don Mariano Marcos Memo- rial State University	Sericulture Project
DOLE/ Province of Ifugao	Sweetpotato Production and Processing Enter- prise in Ifugao
DOST-CAR	Research and Development
HARRDEC (Highland Agriculture Research Resources Development Consortium	BSU as Host Institution/Secretariat
IPB (Institute of Plant Breeding)	Improvement of Highland Vegetable Crops
Land Bank of the Philippines	Technology Promotion Center
LGU of Kapangan	Adopt a Community in Kapangan (funded by PIUC)
LGU of La Trinidad; Benguet	Biological Control of Phytophagus Mites and Aphids in Selected Crops in the Cordillera
LGU of Aringay	Sweetpotato and Potato Lowland Production
LGU of Atok	Improvement of the Seed Production Technology in the Philippines ( Community-Based Nurseries (Go) Production
LGU of Bokod	Assistance in the conduct of social researches
LGU of Itogon	Rootcrops Processing
LGU of Kabayan	On-farm Research on the Control Management of Earthworm in Rice Paddies

INSTITUTION	NATURE OF LINKAGE
MMSU (Mariano Marcos State University)	Potato and Sweetpotato Lowland Production
Mt. Province Broadcasting Corporation Station DZWT	BSU on the Air
Municipality of La Trinidad; Benguet	Biological Control of Phytophagus Mites and Aphids in Selected Crops in the Cordillera
Neys-van Hoogstraten Foundation	Contribution of Sweetpotato Production and Processing to household Income and Nutrition
Nueva Viscaya State Institute of Technology	Potato NCT Trials
Philrice	<ul> <li>Rice KCS:BSU as Regional Research Station for Rice</li> <li>Development of Rice Cool Tolerant Varieties</li> </ul>
Plastro Phils.	BSU-PLASTRO Greenhouse with Drip Irrigation System
TCA (Tarlac College of Agriculture)	Potato and Sweetpotato Livelihood Project for the Lowlands of Northern Luzon
TESDA (Technical Education Skills Development Authority)	Dissemination of Technologies during spon- sored trainings
US PEACE CORPS	<ul> <li>Integrated Farming System Extension Program</li> </ul>
ViSCA (Visayas State College of Agricul- ture) now Leyte State University	National Cooperative Testing on Sweetpotato





## Research and Extension Staff Development

In order to develop the capabilities of the University researchers and extension workers, some faculty and staff members were sent to attend seminar-workshops. The University also

conducted in-house some seminars/workshops and encourage its faculty and staff to pursue their graduate degrees.

Title of Seminar/Workshop	Venue	Date	Sponsor	Person/s/Office In- volved
Workshop on Updating Fertilizer Recommendations for Various Crops	Long Beach Re- sort, La Union	12/16-17/03	DA Region 1	Carlito P. Laurean
Accredited Researchers Training for Fertilizer	CEC, UPLB	12/10-12/03	FPA & Pesticide Mgt Council of the Phil. Found'n.	Carlito P. Laurean
Zonal Research Project	BSU, La Trinidad, Benguet	12 / 3/03	ZRC-CHED BSU	Carlito P. Laurean Ma. Klondy T. Dagu- pen Lorenza C. Balaoing
10th International Agribusiness Exhibition and Seminars and 4th International Food Processing/Packaging and Food Products Exhibition	World Trade Cen- ter, Roxas Blvd. Metro Manila	10/17/03		Carlito P. Laurean Amelia M. Kimeu Wilma L. Marquez Natividad Demot Criselda S. Battad
Regional Technical Working Group 4th Quarter Meeting, Planning Work- shop & HARRDEC Anniversary Celebration	ISCAF Nayon, Lamut, Ifugao	10/ 24-25/03	HARRDEC, ISCAF	Office of the VPRE
Zonal Research Program Conference-Workshop	MMSU, Batac, Ilocos Norte	10/17-18/03	ZRC-CHED	Carlito P. Laurean
Biotechnology	UP Baguio	10 /13/03	UP Baguio	Cynthia G. Kiswa
Workshop on the Proposed Ornamentals Marketing Center	ATI-NTC, BSU, La Trinidad, Benguet	10/13/03	BSU DA	VPRE and RDE Staff DA officials Farmers
Workshop on the Development of GEF Proposal on Strategic Environ- mental Entrepreneur-ship in Selected Ecological Corridors in Cordillera, Philippines	ATI-NTC, BSU, La Trinidad, Ben- guet	10/ 6-7/03	DA-CAR	Carlito P. Laurean Zyla C. Macasieb John G. Tacloy
8th Floriculture Congress	BSWM, Quezon City	10 /6/03		Sonwright B. Maddul et al.
Forum Workshop on Health and Social Science Perspectives Towards Research and Advocacy Capability Building	Baguio Country Club	9/ 26/03	Phil. Health and Social Science As- sociation (PHSSA)	Jariet Siano
8th National Educators' Assembly for Environmental Protection & Man- agement	Fort Ilocandia, Laoag City	9/17-19/03	PATLEFAM DENR-EMB	Carlito P. Laurean
Plant Variety Protection	ATI, BSU	9/15/03		Johnny G. Dati
In-Country Learning Workshop on Participatory Research and Devel- opment	La Maja Rica Hotel, Tarlac City	9 / 4-5/03	CIP- UPWARD	Jocelyn C. Perez Jovita M. Sim

Title of Seminar/Workshop	Venue	Date	Sponsor	Person/s/Office In- volved
Policy Conference on Higher Educa-		8/30/03	CHED-CAR	Sonwright B. Maddul
Intellectual Property Rights and Mar- ket Encounter for ARCs in Ancestral Domains in the Cordilleras	Skyrise Hotel, Baguio City	8/ 28-29/03	NCIP-CAR and DAR- CAR	Ma. Klondy T.Dagupen
Internet/Intranet Awareness Seminar	RITC, BSU	8/18/03	PIUC.BSU	Dalen T. Meldoz
Technology Dissemination Conference	Reneca Hotel, Baguio City	8/18-22/03	HARRDEC and CHARMP	Sonwright B. Maddul Carlito P. Laurean Rosana P. Mula
Regional RDE Symposium and Farmers Forum	BSU, La Trinidad, Benguet	8/13-14/03	HARRDEC BSU	Office of the VPRE RDE Technical Staff
Consultative Workshop on the Community-Based Monitoring of Pesticide	BSU, La Trinidad, Benguet	7/28/03	BSU, NCPIS- DOH Manila	Carlito P. Laurean Lita M. Colting
PCASTRD Information Campaign on Its Priority Areas	UP Baguio	7/25/03	PCASTRD	Carlito P. Laurean
Project Management in Poverty Free Zone Areas in Banaue, Ifugao	Ifugao	6/25-28/03	BRW-DOLE	Ines C. Gonzales Hilda L. Quindara
Biotechnology, Health and Society: Bridging Education, Research and Environment	Supreme Hotel, Baguio City	6/ 25-27/03	DA-BAR	Jocelyn C. Perez Paz A. Dalang Cynthia G. Kiswa Grace S. Backian

## In-house seminars and workshops conducted in relation to research and development

Title of Seminar/Workshop	Venue	Date	Sponsor	Persons Involved/ participants
Zonal Research Project Proposal Preparation Workshop	BSU, La Trinidad, Benguet	December 3, 2003	ZRC-CHED BSU	C, P. Laurean M. K. T. Dagupen L. C. Balaoing
Initiating Intellectual Property Man- agement Mechanisms in Benguet State University	BSU, La Trinidad, Benguet	Dec. 4-5, 2003	BSU HARRDEC	VPRE and RDE Selected Staff
Consultation-Workshop on the Estab- lishment of Ornamental Marketing Center at BSU	BSU, La Trinidad, Benguet	Sept. 26, 2003	BSU	
Seminar-Workshop on Project Proposal Preparation	BSU, La Trinidad, Benguet	Sept. 1-4, 2003	BSU PCASTRD	VPRE RDE Staff
Internet/Intranet Awareness Seminar	BSU	August 18	BSU/ PIUC	Selected Staff
Research Methods for Social Scientists	ICT Hall, BSU	May 19-30	BSU-PIUC	40 participants from BSU, other SCUs, and line agencies
Training on Ex-ante Socio-economic Evaluation of R & D Projects	Training on Exante Socio-Econ. Evaluation of R & D Projects	March 5-8	BSU -PIUC	18 Faculty and Researchers

## PRODUCTION

Under Production function, the University engaged in business type or commercialized production activities that demonstrate breakthroughs instruction, research and extension. Through this function, revenues are generated to provide logistic support to the programs and projects of the University, as well as, to augment the maintenance and other operating

expenditures (MOOE). lt further provides employment to students and out-of-school youths in the community, and also serves as a venue for smallscale business opportunities to uplift the economy of the urban poor.

For the year 2003, the University was about to earn a net income of P28,923,495.19.

#### I. Income Generating Projects

PROJECT	GROSS INCOME	TOTAL EXPENSES	NET INCOME	ROI(%)
1. Fund 161				
Agroforestry	172,765.00	77,431.60	95,333.40	123.12
Bakery	629,441.65	383,272.50	246,169.15	6.21
Cattle (Dairy)	123,051.50	69,970.91	53,080.59	75.86
Floriculture	16,495.00	107,883.20	(91,388.20)	34.32
Food Processing	1,522,886.34	309,810.49	1,213,075.85	-84.71
Marketing Center	1,361,679.90	412,018.44	949,661.46	8.52
Multi Vegetable	113,606.50	70,854.42	42,752.08	60.34
Mushroom	33,952.59	128,772.00	(94,819.41)	-73.63
Pomology	30.600.00	44,630.96	(14,030.96)	-31.44
Potato Seed Production	94,700.00	40,665.00	54,035.00	174
Poultry(Egg Production)	4,102,698.51	2,284,367.77	1,818,330.74	79.60
Souvenir Gift Shop	158,100.50	87,253.01	74,847.49	85.70
Swine/Piggery	324,500.00	385,675.68	(61,175.68)	-15.86
TOTAL	3,684,477.49	4,402,605.98	4,281,871.51	18.76
2. Fund 163				
CEAT Canteen	111,785.33	99,636.40	12,143.93	4.42
CHET Showcase	521,281.60	305,894.08	215,387.52	41.86
Dormitory	421,908.50	288,685.22	133,223.28	46.15
ELS Canteen	(530.06)	121,988.70	(122,518.76)	-21.30
Guestels (HMEG)	754,737.00	287,703.77	467,033.23	162.33
RSDC Cafeteria	1,489,365.83	809,940.28	679,425,55	15.65
SLS Canteen	340,745.92	135,695.20	205,050.72	37.16
Vet. Clinic	456,148.46	402,689.77	53,458.69	13.03
TOTAL	4,095,442.58	2,452,233.42	1,643,209.16	22.71
3. Fund 164				
Agricultural Land/Bldg Rentals			4,152,715.59	
Commercial/Livelihood Stalls			1,563,187.00	W 7 4 5 1
Tuition and other fees			17,282,511.93	
Total	100		22,998,414.52	
GRAND TOTAL			28,923,495.19	

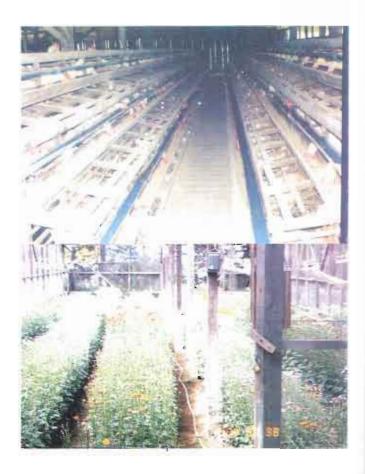
#### II. New Projects Implemented

- A. MCDO FASTFOOD (BLT)
- B. BSU Purified Water Refilling Station (FRESHDROPS)

#### III. Salient Developments on Production

- The Annual Production Plan was approved. implemented monitored in accordance with NBC 331, COA Circular No. 84-239, and existing government accounting and auditing policies. rules regulations.
- The Incentive Scheme for Income Generating Project (IGP) staff was implemented after it was approved by the Board of Regents accordance with limitations under NCC 75, specifically for IGPs under Revolving Fund 161 and 163.
- @ Greenhouses for the following agribased projects were constructed: high valued crops: (1) and floriculture (cutproduction; flowers).
- Projects were expanded in terms of acquisition of equipment, renovations, relocation, etc. poultry house was extended to accommodate alternate flocks to assure continuity of egg production whole year round. The facilities of cafeteria the outlets (RSDC/ELS/CEAT) were repaired and kitchen utensils and equipment acquired. The Processing Center and Bakery were and renovated repaired and and display additional shelves cabinets for the Marketing Center were acquired.
- © The equipment for use of administration support units, land reservation. security. etc. were augmented equipment included communication units, typewriters, computers, generators.
- Monthly reports from IGP managers whose projects produce ROI based

- on their production plan submitted in January 2003 were promptly handed This came about because supervision and monitoring of project activities.
- © Colleges and other departments worked closely for the institutionalization of College/Department IGPs for selfreliance. augmentation sustainability as well for as transparency.
- Memorandums of agreement with individuals. agencies (privategovernment), developers, partners, etc. for University's land use were inked.
- Supplied processed foods and rendered catering services to government agencies like DA-CAR, LGUs, etc.
- BSU income-generating products were advertised through local as well as regional papers and anniversary celebration programs of LGUs, NGOs, etc.





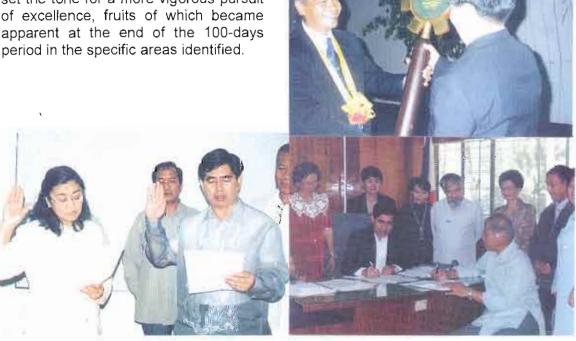
## **General Administration**

## GOVERNANCE

## A New University Leadership

On July 1, 2003, Dr. Rogelio D. Colting became the new President of the Benguet State University, with a four-year term of office. In no time, Dr. Colting bared his Ten-Point Agenda for the first 100 days of administration. The agenda focused on the following areas: academic programs and instruction; research and development; extension resource services: generation; administration and governance; information communications and technology; human resources development and personnel welfare; student service and welfare program; culture and arts program; disaster and emergency program; and security. This set the tone for a more vigorous pursuit of excellence, fruits of which became apparent at the end of the 100-days

With the new President arose a new administrative team. Three young energetic personnel designated Vice President as follows: Dr. Feliciano G. Calora Jr. for Academic Affairs, Dr. Sonwright B. Maddul for Research and Extension, and Dr. Darlyn D. Tagarino for Planning and Development. New deans, directors and chairpersons were given the mandate to pursue changes in their respective colleges/institutes/units. Each was given a two-year term of office.



## Changes in the Governing Board

Three members of the Board of Regents were changed. After leading the successful selection of the new BSU President. Hon. Ester Albano-Garcia. retired from government service. Hon. Rolando R. Dizon, on becoming the Chair of the Commission on Higher Education on June 1, 2003, took over the Chair of the Benguet State University Board Regents. During its 106th meeting, the chair took his oath together with other new members, namely, Dr. Edna A. Chua, BSU Faculty Club President, and Dakila F. Padua, President of the Supreme Student Council.

From January to June 30, 2003, the Board of Regents acted on 22 resolutions addressing various concerns of the University. From July 1 to the end of the year, the Board passed 47 resolutions, foremost of which were the creation of the presidential search committee; grant of honoris causa, Doctor of Development Studies, to Prof. Dr. Joseph Leunis; revision of the BS Forestry-Agroforestry major and the merger of the Elementary Music and Arts and Physical Education under the Bachelor of Elementary education; approval of the status quo in the secondary levels of the integrated campuses; approval of the granting of

scholarships to the presidents of the FFPCC and the COMELEC: selection of Dr. Colting as BSU President; approval of the award of a Professor Emeritus to Dr. Cipriano C. Consolacion; approval of the University Financial Management Protocol; creation of a committee to look into the creation of a subsidiary corporation at BSU; creation of an Executive Finance Committee; and reconstitution of the search committee for two prominent citizens to fulfill the stipulations under Republic Act 8292 "Higher Education Modernization Act of 1997."

## Leading Change

The new President choosing to effect change, initiated the conduct of a series of proactive activities from July to November.

From June 30 to July 1, a seminarfinancial management workshop on protocol was held at the Agricultural Training Institute-National Training Center. The members of the University Administrative Council actively participated. The resource persons included Dir. Liza Fangsilat of the Department of Budget and Management-CAR; Dir. Mary Bacwaden, Cluster Director for Education of the Commission on Audit-CAR, and Magdalena Jasmin of the Commission on Higher Education-CAR. This seminar-





workshop resulted to the development of a University financial management protocol.

In August, the entire university operations were reviewed by a team of selected key BSU personnel, it thoroughly evaluated the operation of the following sectors; academic, research and extension, administration, and production.

Based on recommendations made by the internal reviewers, an external review team was organized in September. The team validated the findings of the internal reviewers through interviews with key informants, ocular observations, and review of pertinent University documents. They gave other valuable insights for improving University operations. This team is composed of the following prominent individuals:

On November 5, 2003, various sectoral heads met with their respective deans/ directors/ heads in a pre-planning workshop for the following purposes: 1) to review the Ten-Year University Plan (2002-2011), 2) to review the 2003 University Operations Plan, and 3) to assess what recommendations made during the internal and external reviews could be adopted.

subsequent meetings, various sectors prepared their medium term plans. The Planning Workshops held from November 17 to 19 at the Coconut Groove in La Union culminated the activities conducted since August. following were the outputs; finalization of the BSU Medium-Term Plan 2004-2007, revision of the Vision, Mission, Objectives and Goals, of the University and revision of the University Organizational Structure.

#### For the Academic Sector:

Dr. Kate Botengan-Retired Chair, Commission on Higher Education

Dr Fernando Bernardo- Retired President, Visayas State College of Agriculture

For the Research & Extension Sector:

Dr. Maruja Lorica- Program Director, Consortium Operations Office, PCCARD

Dr. Santiago Obien- Retired Director, PHILRICE

For the Administration Sector:

Dr. Fortunato Battad – Retired President, Central Luzon State University

Dr. Saturnino Ocampo Jr.- President, Mariano Marcos State University

For the Production Sector:

Dr. Eduardo Marzan- Professor, CLSU

Dr. Ernesto De Chavez-President, Batangas State University



In pursuit of better governance, the budget committee of the University was formally convened during the last quarter of 2003. The committee worked on the improvement of the University the financial

management. It suggested that financial resources be tapped by expanding local and foreign networking, that funds be properly used, and that disallowances be maximized.

## ADMINISTRATION

## Administrative Staff Development

The University continuously supports the development of its administrative staff by encouraging them to pursue their graduate studies, and/or granting them partial scholarships. This year, four administrative personnel finished their graduate degrees. Others are still ongoing.

Name	Office Unit	Degree	University
Awingan, Patselyn	HRMO	Master in Public Administration	Benguet State University
Lascano, Elizabeth	Library	Master in Public Administration	Benguet State University
Mating, Bernadette	Legal Office	Master in Public Administration	Benguet State University
Mondoza, Cheryl Moanoa R.	OSA	Master in Public Administration	Benguet State University
Vazquez, Shella Mae	College of Arts and Science	Master in Public Administration	Benguet State University

### Administrative Staff Retirees

Seven administrative personnel including the University President, Dr. Cipriano C. Consolacion retired from the University service in 2003.

Name	Position	Date Retired
Angco, Almirante V.	Cook II	Feb. 1, 2003
Baybay, Andrew M.	Farm Worker II	Feb. 1, 2003
Palaez, Teresita A.	Dentist IV	May 10, 2003
Consolacion, Cipriano C.	SUC President III	June 30, 2003
Wayan, Pablo	Farm Worker II	July 1, 2003
Dawson, Romeo P.	Carpenter II	July 4, 2003
Anongos, Angelita F.	Col. Librarian IV	Aug 2, 2003

## Upgrading of Physical Facilities and Equipment

The water system, one primary concerns of the University since the previous year, is on the way to being improved this year. All the needed equipment, supplies and materials were purchased. Presently, those not installed are only the distribution pipelines inside the buildings and the drinking fountains in the school canteens.

In spite of budgetary constraints, the University was able to raise the needed amount for repairing the Sericulture Buildding, the Agricultural Information and Knowledge Center, and the perimeter fencing of the University land reservation in Wangal, A total of 3.56 million was used to purchase equipment needed such as a power generator for the use of the Open and Closed gymnasium for office equipment, 1,254 million was taken from the revolving fund and 145,179 from the collections of a special class, the Reviewer class, for Licensure Examination for Teachersof the University.

INFRASTRUCTURE	SOURCE OF FUND	TOTAL COST	STATUS
Improvement of the University Water System     Well drilling of exploratory Production well (1)	GAA	10M	completed
✓ Pump/Generator house			completed
√ 150 cu.m. concrete ground reservoir (water tank)			completed
<ul> <li>✓ Main water system transmission &amp; distribution (labor)</li> </ul>			completed
✓ Water purifying Station		(	Completed
✓ Installation of distribution pipes and inside buildings and installation of drinking fountains in canteens			On-going
2. Improvement of the Sericulture Project	University Income	786,679.00	Completed
3. Agricultural Information and Knowledge Center	University Income	450,345.75	Completed
4. Perimeter Fencing at Wangal, La Trinidad	University Income	825,111.44	Completed

QTY.	` EQUIPMENT	TYPE/PURPOSE	SOURCE OF FUND	TOTAL COST
1 unit	Generator	water system	GAA	534,075.00
1 set	Water Refilling station (Agua Vida)	Marketing Center	GAA	750,000.00
	Pipes and Accessories for the distribution pipe lines of water system	Water System	GAA	2,057,188.50
1 set	Survey Equipment	For use of Land Reservation	GAA	325,000.00
1 unit	Copier	Gestetner Brand model 2732Z	University Income	247,000.00
1 unit	Power Generator, Gym	Open and Closed gym	University Income	673,762.00
			TOTAL	4,587,025.5



### Financial Resources

As shown in the condensed financial statement ending December 31, 2003, the University had an income of P245,266,163. This amount included the share from the national budget amounting to P191,599,189. For 2003, income greatly exceeded expenses amounting to P40,714,588. Details of the income and expenses statement are shown below.

The consolidated balance sheet for the year shows that the University had a total asset of P2,007,910,367

#### CONDENSED STATEMENT OF INCOME AND EXPENSES

For year ended, December 31, 2003

INCOME		P245,266,163
LESS: EXPENSES:		
Personnel Services	176,281,405	
Maintenance and Other Operating Expenses	28,251,489	
Financial Expenses	18,681	204,551,575
EXCESS OF INCOME OVER EXPENSES		40,714,588

#### CONDENSED BALANCE SHEET

As of December 31, 2003 (consolidated)

ASSETS		
Current Assets		
Cash	48,143,668	
Receivables	13,273,154	
Inventories	42,125,498	N.
Pre-paid Insurance	126,863	103,669,183
Property, Plant and Equipment		1,903,356,039
Other Assets		885,145
TOTAL ASSETS		2,007,910,367
LIABILITIES AND EQUITY		
LIABILITIES		
Liabilities	16,539,004	
Other liabilities	688	16,539,692
EQUITY		
Government Equity		1,991,370,675
TOTAL LIABILITIES & EQUITY		2,007,910,367

## Major Foreign Linkage

#### The PIUC

PIUC, acronym for the Philippine Institutional University Cooperation Program, is an educational development grant given by the Belgian government through the Flemish Inter-University Council (VLIR) for Benguet State University in partnership with the Saint Louis University (SLU). With a P130 million grant for the two universities, the PIUC ended the four-year phase 1 on March 18, 2003. From this period until March 19, 2004, the bridging year will be implemented. The bridging year is transition period for implementation of another five years 2004 to 2009) of a (Phase II, comprehensive educational grant.

## Accomplishments from January to December 2003

During last quarter (January 1 to March 18, 2003) of the final year of phase 1. the following were achieved: the completion of the basic university ICT network infrastructure, purchase of books and virtual facilities for the construction of essential research and instruction laboratories, and provision of support to the socioeconomic research institute, and human resource development through short and long-term scholarships to Belgium for 21 faculty members, officials and staff

For the bridging year, a total budget of 227,970 Euro (roughly ₱ 13.2 million at 1 EUR = ₱ 58) was earmarked from the PIUC for Benguet State University. For the three quarters (March 19 to December 31, 2003), significant results were obtained from the five components, as follows:

#### Project 1:

Strengthening the SLU/BSU Network and IUC Program Management Budget: 59,987 EUR (3.5 million PhP)

#### Project 2:

Institutional Management and Policy Development

Budget: 6,879 EUR (0.4 million PhP)

#### Project 3:

ICT Development

Budget: 26,417 EUR (1.5 million PhP)

#### Project 4:

Library Development

Budget: 32,677 EUR (1.9 million PhP)

#### Project 5:

Integrated Teaching, Research and

Extension

Budget: 102,010 EUR (5.9 million PhP)

Project 1 was the result of the evaluation mission recommendation to strengthen the partnership between SLU and BSU. Numerous joint activities with SLU were conducted. This ranged from joint ICT and library training, joint research and extension, and faculty exchange.

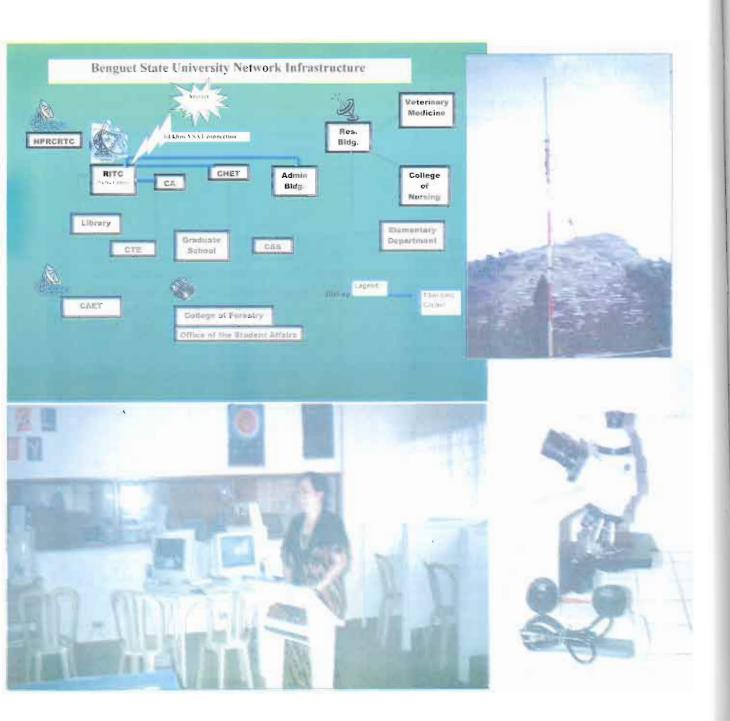
Project 2 supported the internal and external review of BSU operations, and the pre-planning and planning proper workshops.

Project 3 on ICT Development enabled the continued acquisition of hardware and software to support the ICT laboratories, supported two ICT personnel to attend an e-learning and distance education workshop Belgium, and initiated the development of an automated enrolment system for the university.

Project 4 facilitated the continued acquisition of books, journals and electronic resources for the library. For the reporting period, the Essential Electronic Agricultural Library (TEEAL) digital journal software and the FOLLETT system was acquired. The faculty and students were informed of the library collection and facilities.

Project 5 enabled the Colleges of Agriculture, Arts and Sciences, and the Home Economics and Technology, and the Institute of Social Research and

Development to purchase state-of-the – art equipment for selected laboratories. As reported under the section on Research and Extension several researches were funded. Financial support was given to attendance to and conduct of trainings and seminars.



## **Buguias Campus**

It started as Loo Settlement Farm School on January 23, 1932 under the Department of Education with an area of 30.6487 hectares, with Proclamation # 435 it was integrated to Benguet State University on May 24, 2001.

#### Vision:

To be an ideal educational center where programs are varied and relevant. where appropriate knowledge, skills and values are developed and where scientific production of goods and services are provided.

#### Instruction

Enrolment. The total enrolment for the first semester, SY 2003-2004, was 747, with 529 (70.82%) in the secondary school, 153 (20.48%), BS courses; 21 (2.81%), short courses', and 21 ((2.81%), graduate school. The majority (117, 15.53%) of those enrolled in baccalaureate courses are taking Bachelor of Secondary Education.

Graduates of short term courses being offered took the TESDA Trade Test and worth noting is the average passing rate of 73.38%, with 100% passing rate in draftsman, tailoring dressmaking and cookery. Weakness centered on building electrician and automotive.

#### Mission:

To provide and enhance quality instruction, research, extension and production by improving its programs', developing its teachers and support staff as well as students, and improving their physical capabilities.

#### Goal:

To empower teachers, researchers, entrepreneurs, and extension workers to be infused with high sense of values, knowledge competitive skills so as to contribute to nation building.

Graduates. For the year 2003, of the 33 graduates, 14 finished Bachelor of secondary education, five in BS Industrial Education; and 14, various short courses.

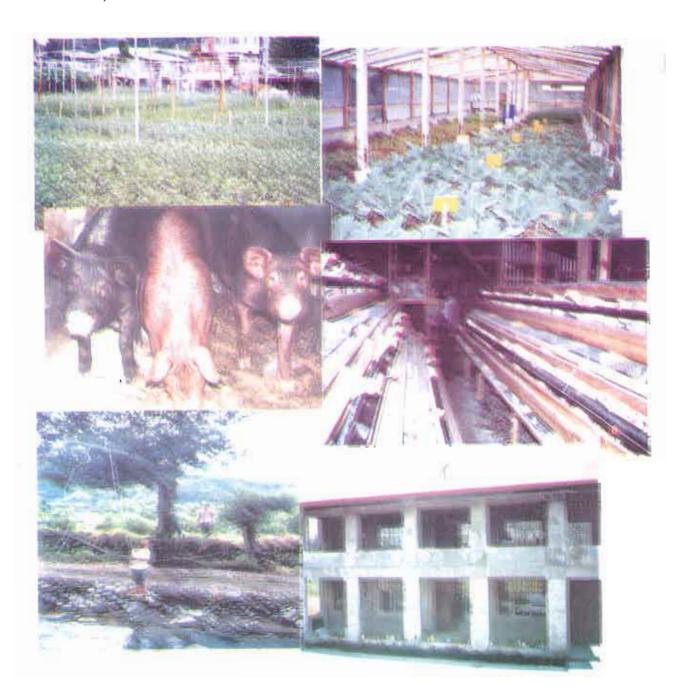
Event	No. of	No. of Passers
	Examinees	
Draftsman	41	41
Rough Carpentry	40	31
Finish Carpentry	8	5
Baking	33	20
Tailoring	2	2
Dressmaking	8	8
Cookery	2	2
Building Wiring		
Electrician	11	4
Automotive	9	0
TOTAL	154	113

### **Faculty and Staff Development**

The Head of Office is designated as the Executive Dean. There are 72 regular employees; 46 faculty, 19 support staff, six contractual workers, and one volunteer teacher. Out of the 46 faculty members, 12 are currently pursuing higher degrees

mostly on their own. Only Mr. Felicisimo Bugaoisan is enjoying the study under the Magna Carta for Teachers. Faculty and staff are encouraged to attend trainings, seminars and workshops in their line of specialization. For 2003, several faculty and staff attended a total of nine seminars and workshops.

#### Extension, Research and Infrastructure



## **Bokod Campus**

#### Instruction

Enrolment The total enrolment was 356, distributed as follows: Bachelor of Science in Industrial Education 134; Bachelor of Science in Industrial Technology 141, and Bachelor of Elementary Education 81. Enrolment increased by an average of 3.5% from SY 2002-2003. In terms of the individual degree, enrolment in BS Industrial Education decreased by 25.56%, but those in BS Industrial Technology and Elementary Education increased by 29.36% and 47.27% respectively.

**Graduates.** There were 54 graduates in the baccalaureate degrees being offered. Of these 54 graduates, 41 are graduates of the Bachelor of Science in Industrial Education

and 13 of the Bachelor of Science in Industrial Technology. The number of graduates decreased from that in 2002 by 28 %. The greater decline was in the number of BS Industrial Technology graduates, which decreased by 62.86%.

#### Performance in Licensure Examination

Thirty four graduates of the Bachelor of Science in Industrial Education took the Licensure examination for teachers in 2003, and 11 (32.3%) passed.

#### Student Scholarship

The scholarships availed of by 66 students in the different baccalaureate degree are the barangay scholarship (62.12%), NCIP grant (25.76%), PDMSASP grant (3.03%), and Municipal scholarship (9.10%).

#### Highlights of other accomplishments

- Opening of the school canteen
- Improvement of the school water system
- Purchase of 111 copies of reference books
- Participation to Provincial Agro-Industrial Fair in November 17-21, 2003
- Implementation of income-generating projects were implemented resulting in an income of Php 942, 192.00



## A Forward Outlook

### Meeting Challenges Head-On

The BSU Medium-Term Plan 2004 to 2007 embodies what the University intends to achieve in the next four years. In a nutshell, the plan is for the University to steer closer to the realization of the vision. It determinedly set out to meet all mind keeping that challenges, in success is close to those who persevere.

#### GOALS:

- To provide education that will enable graduates become competitive.
- To generate and disseminate new knowledge and technologies that promote sustainable resource development and the enrich academic Of the programs University.
- strengthen and enhance institutional capability for generating revenuew towards self-reliance.
- To establish compement and effecitvie services geared towards efficiency and economy.

#### OBJECTIVES:

#### To have...

- Updated curricular offerings
- Globally competitive graduates
- Competent faculty and staff
- Quality, responsive and functional research and extension services
- Efficient and effective resource utilization and management
- Shared values and teamwork in the workplace
- Viable income generating projects
- State-of-the-art infrastructure and facilities
- Policy support to development

The specific strategies to reach the goals and objectives are:

#### Academic Affairs

- Rationalize University degree and Non-degree programs exploring possibilities to develop new and innovative programs and academic units.
- 2. Strengthen research and extension capability of colleges by developing support mechanisms.
- 3. Encourage Colleges/Institutes to create trust fund through Income Generating Projects (IGP) to be used for Representation and Travel Allowance (RATA), purchase of laboratory equipment and miscellaneous expenses
- 4. Evaluate and update Academic Policies to address perennial problems of faculty workload and equivalent research, extension and administrative load.
- 5. Develop MIS for faculty and Students and explore integration of ICT into curricular programs.
- Rationalize University staffing pattern and Initiate development of college/institutes faculty, development plans in line with the University thrust.
- 7. Review Student Code of Conduct and encourage consultation between administration and students to articulate relevant issues.
- 8. Strengthen support to the culture and arts program of the University in recognition of its uniqueness, and to promote ethnic awareness.
- 9. Develop security plans to insure integrity of students' records, and to prevent the use of illegal drugs.
- 10. Develop pro-active student services.

#### Research and Extension

- Strengthen existing local research institutes and create a research and development center for semi-temperate vegetables.
- Fully operationalize research and extension database management.
- Institutionalize Planning, Monitoring and Evaluation for research and extension programs
- Patent BSU-generated technologies for commercialization.
- Integrate research and extension agenda with the regional and national development plans.
- Conduct basic, strategic, applied and socio-economic and policy-oriented research programs on highland vegetable, fruits, ornamentals, agroforestry, rice, livestock and environmental entrepreneurship.
- 7. Promote paradigm-shift towards technology commercialization.
- Strengthen existing technology information/dissemination programs.
- Update and package developed technologies.
- Upgrade existing research and extension facilities.
- Develop capabilities of researchers and extension staff.
- Strengthen partnership with local, regional, national and international agencies/organizations.
- Institutionalize sisterhood accord on research and extension with other local and foreign SUCs.

#### Administration

- Develop a criteria for budget allocation for all sectors
- 2. Continuous personnel development
- 3. Periodic reshuffling of personnel
- 4. Systematize annual work plan schedule
- 5. Implementation of university policies
- 6. Centralized communication flow
- Develop Manual of Administrative Operation

- 8. Efficient and effective delivery of services
- 9. Objectivity in rating employees
- Strict implementation of government rules and regulations
- Institutionalization of outside funded researches
- Comprehensive land development program and titling of the reservation

#### Production

- Production cum research of quality planting materials
- Greenhouse commercial cutflower production
- Setting-up of cutflower demonstration area
- 4. Establishment of consistent source of high valued vegetables
- Establishment of greenhouse Open Field (900 sq.m. continuous cropping
- Improved networking and linkages through identification of SUCs for product exchange, direct suppliers for raw materials, and negotiation with institutional/industry markets for finished products
- Product promotion through advertisement of catering services and other production services to NGO, government agencies and general public and attendance to Trade Fairs by DTI
- 8. Expansion of the existing IGP
- 9. Expansion of poultry project
- 10. Expansion of swine project
- Streamlining of IGPs
   Operationalization of ICT services through the Internet and Network Services and Training Course Programs
- 12. Establishment of new projects and for integration in the land use master plan
- 13. Development and improvement of BSU Food Products
- 14. Development of "Nature Park" products
- 15. Continuation of CHET STAP Program
- 16. Trainings for UBA Personnel
- 17. Continuation of existing projects.

## **BOARD OF REGENTS**

HON. ESTER A. GARCIA

Chairperson, Commission on Higher Education (Until May 2003)

Chair

HON. ROLANDO R. DIZON

Chairperson, Commission on Higher Education (Effective June 2003)

projects

HON. CIPRIANO C. CONSOLACION

President, Benguet State University (Until June 2003) Vice Chair

HON. ROGELIO D. COLTING

President, Benguet State University (Effective July 2003)

HON. FRANCIS N. PANGILINAN

Member

(Represented by Atty. RABINDRANATH QUILALA)

Chair, Senate Committee on Education

HON. HARLIN CASTILLO-ABAYON

Member

(Represented by: **Dr. ROLETH PALACIO**)
Chair, Congressional Committee on Higher Education

HON. JUAN B. NGALOB

Member

Regional Director, National Economic Development Authority

HON. FAUSTINO K. MASLAN

Member

Regional Director, Department of Agriculture- CAR

HON. BEN D. LADILAD

Director, Department of Science and Technology (Until September 2003)

Member

(Gilli copionizor zoda)

HON. MACARIO D. CADATAL

President, BSU Faculty Club (Until May 2003)

Member

HON. EDNA A. CHUA

President, BSU Faculty Club

Member

(Effective September 2003)

HON, FELIPE S. COMILA

Member

President, BSU Alumni Inc.

HON. ADAMSON LABI

President, Supreme Student Council

(Until May 2003)

Member

HON, DAKILA PADUA

President, Supreme Student Council (Effective September 2003)

Member

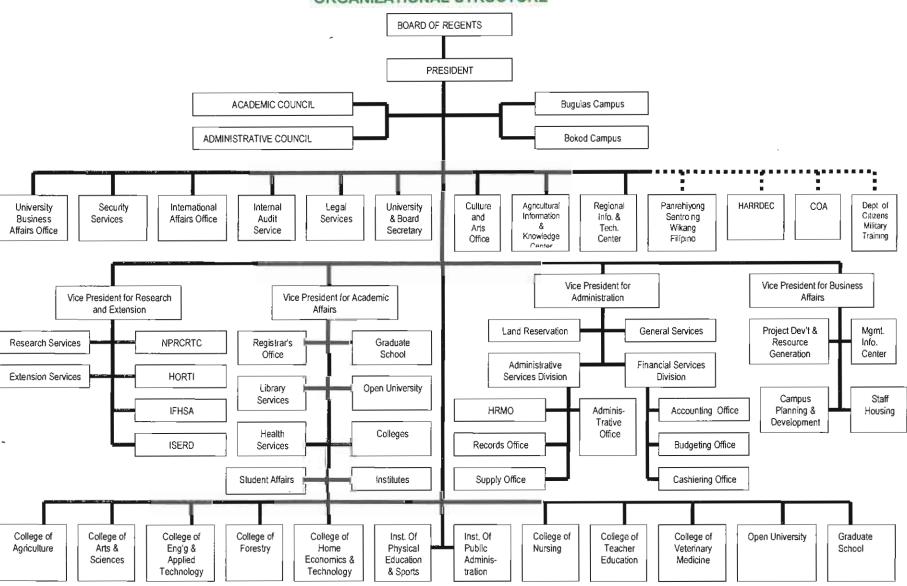
**GRACE T. BENGWAYAN** 

University and Board Secretary

## ADMINISTRATIVE COUNCIL

ADMINIOTICATIVE GOONGLE		
POSITION	Up to June 2003	From July 2003
President VICE CHAIR	CONSOLACION, Cipriano C.	COLTING, Rogelio C.
University Vice President MEMBERS	BAWANG, Franco T.	BAWANG, Franco T.
Chief, Budget Office Director, Horti Research & Training Institute Chief, Legal Services Office Chief, Motor Pool Director, Open University	ALAGAO, Ludivina O ALIPIT, Percival B ANGIWAN, Matias C., Jr ANTONIO, Samson s. BAGANO, Juliet P	ALAGAO, Ludivina O. ALIPIT, Percival B. ANGIWAN, Matias C., Jr ANTONIO, Samson S. BAGANO, Juliet P.
President, BSUNTA University/Board Secretary V Chief, Internal Audit System (IAS) Office Vice President for Academic Affairs	BANIWAS, Tranquilino BENGWAYAN, Grace T BOLINTO, Violeta B BULIYAT, MARCOS C.	BANIWAS, Tranquilino BENGWAYAN, Grace T BOLINTO, Violeta B CALORA, Feliciano, Jr.
President, Faculty Club Dean, College of Forestry Director, University Library Services Chief, Property & Supply Mgmt Office Dean, College of Veterinary Medicine	CADATAL, Macario D. TACLOY, John G. CLARAVALL, Nora J. COILAN, Nicanra J. DIEGO, Ruth C.	CHUA, Edna A PARAO, Marissa CLARAVALL, Nora J. COILAN, Nicanra J. CASTRENCE, Anatalia V
University Registrar Director, ISRD Special Assist for Community & Alumni Affairs Chief, Human Resource Management Office Chief, Medical and Dental Services	DUGAT, Virginia R. TAGARINO, Darlyn D. DANGWA, Olga C. ESTEBAN, Emilia M. FORMARAN, Villa L.	COLTING, Lita M. DAGUPEN, Marie Klondy T. DANGWA, Olga C. ESTEBAN, Emilia M. FORMARAN, Villa L.
Dean, College of Nursing Dean, Graduate School Director, NPRCRTC Director, Publication and Media Services Director, General Services	CAWAON, Florence C. GARIN, Dominador S. SALDA, Violeta B. JACALAN, Gilda B. LAPICTO, Eladio O.	GASCON, Grace A. GARIN, Dominador S. GAYAO, Betty T. JACALAN, Gilda B. LAPICTO, Eladio O.
Director, Gereral Services Director of Research Director, Institute of Public Administration Chief, Cashiering Office Chief, Records Office Dean, College of Arts and Sciences Dean, College of Teacher Education	COMILA, Felipe S. LIMPIN, Oscar B. LIMPIN, Victoria L. CHUA, Edna A. LUBRICA, Percyveranda A	LAUREAN, Carlito P. LEE, Gloria R. LIMPIN, Oscar B. LIMPIN, Victoria L. LUBRICA, Joel V. LUBRICA, Percyveranda A
Director, Inst. of Highland Farming Systems & Agro-forestry	MADDUL, Sonywright B.	LIGAT, Julio S.
Vice President for Research & Extension Dean, College of Agr'l Eng'g & Technology Director, Regional Information & Technology Center Director, Office of Student Affairs Director, Extension Services	COLTING, Rogelio D. MACASIEB, Genaro W., Jr MACASIEB, Zyla C. MINA, Wilfredo B. MULA, Rosana P.	MADDUL, Sonwright B. MACASIEB, Genaro W., Jr MACASIEB, Zyla C. MINA, Wilfredo B. MULA, Rosana P.
Chief, Administrative Services Division Chief, Accounting Services Director, Institute of Physical Education Dean, College of Agriculture Dean, College of Home Econ & Tech	RAMOS, Estrella A. RAPUSO, Mary Joy S. RIMANDO, Teofilo PADUA, Danilo P. AVILA, Jane K.	RAMOS, Estrella A. RAPUSO, Mary Joy S. RIMANDO, Teofilo SOLIMEN, Julia A. SOMYDEN, Ma. Corazon A.
Director, HARRDEC Vice President for Planning & Development Director, Land Reservation Office & President, BSUTEA	TANDANG, Leoncia L. MERESTELA, TESSIE M. TIPAYNO, Alfredo C.	TANDANG, Leoncia L. TAGARINO, Darlyn D. TIPAYNO, Alfredo C.
Chief, Finance Division Director, Sentro Ng Wikang Filipino ROTC Commandant Resident Auditor (COA)	VICTOR, Priscilla P. VICTOR, Florencia C. WILLIS, Mary D.	VICTOR, Priscilla P. VICTOR, Florencia C. WILLIS, Mary D
Editor-in-Chief, MC SSC President Executive Dean, Buguias Campus	BASITAN, Ilene S. LABI, Adamson F. COTIW-AN, Basito S.	BASITAN, Ilene S. PADUA, Dakila COTIW-AN, Basito S.
Superintendent, Bokod Campus	PANANGON, Albert B	PANANGON, Albert B.

## BENGUET STATE UNIVERSITY ORGANIZATIONAL STRUCTURE



#### ORGANIZATIONAL STRUCTURE (Proposed) BOARD OF REGENTS **PRESIDENT** ACADEMIC COUNCIL University & Board HARRDEC Secretary ADMINISTRATIVE COUNCIL COA **NPRCRTC** Land Internal Security Legal Planning and Public Special Bokod Buguias Reservation Audit Services Services Development Affairs Projects Campus Campus Office Office Office Vice President for Research Vice President for Academic Vice President for Vice President for Business and Extension Affairs Administration Affairs OPS Registrar's Special Cultural Administrative Financial Services Agri-based IGP Non Agri-based Office Office Services Division Division **IGP** ODR ODE Library Student General Services Auxiliary Services Financial Services Services Affairs Division Division HORTI ISRD STV **IFHSA** Health RDC Services College of Open Graduate College of Institute of Institute of Engineering University School Agriculture Arts & Forestry Home Nursing Teacher Veterinary Public **Physical** & Applied Sciences Economics & Education Medicine Administration Education & Technology Technology Sports

BENGUET STATE UNIVERSITY

### Academic Programs

#### Graduate Degree Programs

- Doctor of Education in **Educational Management**
- Doctor of Education in **Educational Management**
- Doctor of Education in **Educational Management**
- > Master of Arts in Applied Chemistry, English Statistics. as a Second Language, Filipino as Second Language, General Science, Home Economics, Physics, Physical Education, Social Studies, and **Technology & Home Economics**
- > Master of Arts in Education, major in contextualized Instruction. Educational Administration and Supervision, Elementary Education, and Guidance and Counseling
- Master of Forestry in Silviculture. and Watershed Management
- Master in Public Administration
- Master of Resource System Management
- Master of Science in Agricultural Economics, Agricultural Education, Agronomy, Animal Science, Biology, Entomology, Extension Education, Forestry Horticulture, Plant Pathology, Rural Development, and Soil Science
- > Master of Science in Mountain Engineering (in coordination with SLU and BCF)

#### Postsecondary Non-degree Program

- Diploma in Agro-forestry (DAF)
- Forest Ranger Certificate Course
- Certificate in Basic Automotive Technology
- Certificate in Advanced Automotive Technology

### **Undergraduate Degree Programs**

- Bachelor of Science in Agriculture (BSA)
- Bachelor of Science in Agribusiness (BSAB)
- Bachelor of Science in Development Communication (BSDC)
- > Bachelor of Science in Applied Statistics (BSAS)
- Bachelor of Science in Environmental Science (BSES)
- Bachelor of Science in Information Technology (BSIT)
- > Bachelor of Science in Agricultural Engineering (BSAEng'g)
- > Bachelor of Science in Forestry (BSF)
- > Bachelor of Science in Home Economics (BSHE)
- Bachelor of Science in Nutrition and Dietetics (BSND)
- Bachelor of Science in Entrepreneurial Technology (BSET)
- > Bachelor of Science in Nursing (BSN)
- Bachelor of Elementary Education
- Bachelor of Secondary Education (BSE)
- Bachelor of Science in Agricultural Education (BSAE)
- Doctor of Veterinary Medicine (DVM)

#### Postgraduate Non-degree Programs

- Diploma in Physical Education
- > Diploma in Public Administration
- > Certificate in Public Administration

#### Pre-baccalaureate programs

- Secondary Laboratory School
- ➤ Elementary Laboratory School
- > Early Childhood Development Program

#### Special Courses

- Japanese Functional English and Experiential Learning Course (JFEELC)
- > BSU-SNU Functional Intensive English Training Program (FIETP)

# **Benguet State University**

La Trinidad, Benguet 2601
Tel: (074) 422-2127 Fax: (074) 422-2401
Website: http://www.bsu.edu.ph