



"Enhancing Innovations in USM RD&E for Academe-Industry Partnership"

# Rationale

This Research Development & Extension (RDE) Agency In-House Review is an annual/yearly activity of the University. The main objective is to review and evaluate all on-going and completed Research Development and Extension Program/ Projects/Studies. This serves as an avenue for all researchers, extension workers and other stakeholders to convene and exchange new knowledge or products generated and development/extension strategies relevant to the University's Vision, Mission and Objectives. It is also through this activity that investments in RDE can be appraised thoroughly to ensure that RDE activities are geared toward addressing the needs and problems of clientele of the University in its service area, in particular, and in the national level in general, for sustained agricultural development and its allied fields. Expectedly, very active interactions will form part of the highlights.

# Objectives

- 1. 1. To evaluate completed and on-going RDE projects/activities particularly with regard to the attainment of objectives and adherence to the approved program;
- 2. To identify problems met during implementation and recommend specific courses of action, i.e., continuation, extension, modification of planned activities and methodology, suspension, termination, etc., in compliance with the recommendations of the evaluating panel;
- 3. To identify technologies generated for field testing, verification, and piloting before its final dissemination/promotion and commercialization;
- 4. To identify mature technologies ready for packaging and dissemination;
- 5. To identify significant results for policy formulation and development;
- 6. To identify new researchable areas; and
- 7. To record and monitor both in-house and externally funded researches.

# Republic of the Philippines

#### **UNIVERSITY OF SOUTHERN MINDANAO**

Kabacan, Cotabato Tel. No. 63 (64) 572-2138 Email address: fgngpres@gmail.com

#### OFFICE OF THE PRESIDENT



#### Message

Research outputs and extension accomplishments can be best shared and evaluated during the in-house review, aside from publication to various journals.

Our 38<sup>th</sup> In-house Review opens a venue for a continual improvement in the conduct of research and extension and for possible establishment of tie-up, as cited in this year's theme, "Enhancing USM RD & E for Academe-Industry Partnership." This has posed a challenge on how to hasten the USM RD & E in attaining its goal of developing technologies, innovations and initiatives that may complement with the industries for wider application, with more beneficiaries, that may contribute in sustaining development.

Researches that may address the needs of the target end users are more encouraged. Extension works that have impact to the partner communities are highly valued. Collaboration is necessary for more proficient efforts and greater results. With our aim of introducing improvement, it is then imperative to chart our course in the future, ensuring that everything is in place, in order to achieve our purpose. I recommend to every researcher to consider the viability of the study, the adoption and acceptance of the possible outputs that may introduce change in the lives of the people in the different communities. It is also our aim of touching the lives of our clientele and stakeholders through our extension activities.

Finally, I would like to extend my heartfelt congratulations and gratitude to the presenters, researchers, evaluators, guests and organizers of this year's in-house review for spearheading the conduct of this significant activity. I believe that this is a very good venue of motivating and inspiring our researchers, especially the budding ones.

I hope that the outputs of this 3-day activity will be useful to everyone. Thank you very much for your participation and God bless us all!

(SGD) FRANCISCO GIL N. GARCIA, RPAE, Ph.D.
SUC President IV

# Republic of the Philippines UNIVERSITY OF SOUTHERN MINDANAO

# Kabacan, Cotabato

Tel. No. 63 (64) 572-2638



# OFFICE OF THE VICE-PRESIDENT FOR RESEARCH, DEVELOPMENT & EXTENSION

#### Message

The USM RD & E In-House Review is a yearly undertaking of the University during which all Research, Development and Extension programs/projects/studies conducted by the University Faculty and full-time Researchers are being presented and evaluated.

It is through this activity that the University management can be provided with information from outputs of these endeavors as bases in making decisions for investing in RDE programs. This event is an initial step in assessing the quality and impact of the RDE projects/studies to the industry. Furthermore, through this endeavor, we can identify research outputs that are globally competitive and which could situate the University of Southern Mindanao in the ASEAN arena.

Congratulations to all researchers and extension workers for unselfishly sharing their talents. May this activity be successful and productive one.

**(SGD) CAYETANO C. POMARES, Ph.D.**VP for Research, Development & Extension

# Republic of the Philippines UNIVERSITY OF SOUTHERN MINDANAO

Kabacan, Cotabato Tel. No. 63 (64) 572-2610

#### OFFICE OF THE DIRECTOR FOR RESEARCH & DEVELOPMENT SERVICES



#### Message

The University of Southern Mindanao (USM) is endowed with so many natural and agricultural resources. In fact, it is the only university in the Philippines where all industrial crops (rubber, oil palm, coconut), high valued tropical fruit and plantation crops (durian, marang, lanzones, mangosteen, rambutan, mango, banana), field crops (rice, corn, legumes, vegetables), forages, medicinal plants, herbs, spices, ornamental species, livestock, poultry and inland fishes are found in one area. These serve as research, development and extension (RD& E) resources in the country, in addition to being a potential agro-farm tourism site. Basic and applied RD& E have been done in these commodities in the past years in USM. However, there are still vast and diverse opportunities to discover, investigate, create and innovate to generate information, products and technologies. This can be achieved by knowledge updating, skill development and utilization of recent advances in science and technology. USM needs to level up the quality of RD& E with greater impact to the consumers, farmers, academic and scientific communities, various industries and other stakeholders. While RD&E efforts by some faculty, researchers and students are acknowledged and commended, concerted efforts from more people are needed to help raise the bar to generate quality and relevant RD&E outputs, making USM more competitive nationally and internationally.

Wishing all the oral and poster presenters the very best of the bests! To all committee heads and members, a million thanks for making this event meaningful and successful. To all evaluators, thanks very much for your kind efforts and time. Congratulations to all!!!

**(SGD) EDWARD A. BARLAAN, Ph.D.**Director for Research & Development Sevices

# Republic of the Philippines

#### **UNIVERSITY OF SOUTHERN MINDANAO**

Kabacan, Cotabato Tel. No. 63 (64) 572-2517

#### OFFICE OF THE DIRECTOR FOR EXTENSION

The 2018 RDE annual in-house review of USM is an opportune time to present and share research findings and technologies for commercialization. This will also serve as a venue to present extension projects implemented for school year 2017-2018. As stipulated in USM quality policy statement, the Extension Services Center (ESC) is mandated to facilitate transfer of technologies generated from research to the community for sustainable development, thus improving the quality of life. The Center intensifies its partnership with various stakeholders in the implementation, monitoring and evaluation of extension programs, projects and activities.

This year, there are 19 extension projects implemented by various colleges and units of the university to identified partner communities. Most of these projects were anchored on the six Extension Strategic Themes which are (1) food safety and security, (2) health and nutrition, (3) economic development, (4) youth, family and community, (5) climate change, and (6) peace and security.

More power to all Extension Project Leaders and Faculty members who passionately afforded the delivery of extension services. Congratulations everyone.

(SGD) ARDNIEL A. BALADJAY, Ph.D. OIC Director for Extension

# General Schedule of Activities

Day 1 - November 27, 2018

Time	Activities
7:00 am—8:00 am	Registration
8:00 am—9:00 am	Opening Program
9:30 am—12:00 nn	Presentation of RDE Projects
12:00 пп —1:00 рт	Lunch Break
1:00 pm— 5:00 pm	Presentation of RDE Projects

# Day 2 - November 28, 2018

Time	Activities
8:00 am—12:00 am	Presentation of RDE Projects
12:00 nn —1:00 pm	Lunch Break
1:00 pm—5:00 pm	Presentation of RDE Projects

Day 3- November 29, 2018

8:00 pm - 12:00 pm	Closing Program
	Presentation of Synthesis
	Awarding of Certificates

# Opening Program

# Café Martina, USM Kabacan, Cotabato November 27-29, 2018 8:00 AM

Invocation Prof. Harem R. Roca

PICRI Director

National Anthem Prof. Arlene Riogelon

Faculty, CA

Welcome Remarks Dr. Cayetano C. Pomares

VP for RD & E

Opening Message Dr. Francisco Gil N. Garcia

SUC President IV

Rationale Dr. Edward A. Barlaan

Director for RDS Over-all Coordinator

Presentation of Evaluators,

Moderators, and

Participants

**Dr. Ardniel A. Baladjay** Director for Extension

**EMCEE**: **Ms. Khadiguia Balah** 

Faculty, CAS

# Panel of Evaluators

# Session 1 - Agriculture Fisheries and Natural Resouces (AFNR) (Research Category)

Dr. Teresita B. Bayaron

Dr. Abonawas M. Pendaliday

Dr. Emmanuel P. Leaño

# Session 2 - Agriculture Fisheries and Natural Resouces (AFNR) (Development Category)

Dr. Naomi G. Tangonan

Dr. Elizabeth D. Malacad

Dr. Lynn Esther E. Rallos

# **Session 3- Non-AFNR( Social Science and Extension)**

Dr. Violeta P. Bello

Dr. Purisima G. Bayacag

Dr. Samsia I. Beduya

# Moderators

# **Session 1 - AFNR (Research Category)**

## Day 1.

AM - Glyn Magbanua
PM - Rommel John Basan

## Day 2.

AM - Arlene Riogelon PM - Renel Alucilja

# **Session 2 - AFNR (Development Category)**

## Day 1.

AM - Dianne Cristel M. Basilio
PM - JM Json Bautista

## Day 2.

AM - Helen A. Macailing
PM - JM Json Bautista

# Session 3 - NON-AFNR (Social Science & Extension)

## Day 1.

AM - Jacinta T. Pueyo
PM - Julius Jerome Ele

## Day 2.

AM - Lawrence Dollente
PM - Ardniel A. Baladjay

# November 27, 2018 - Day 1 - Morning Session 1 -

Category: **Research Category**Venue : **Café Martina** 

Evaluators: **Dr. Teresita B. Bayaron** 

Dr. Abonawas M. Pendaliday Dr. Emmanuel P. Leaño

Rapporteur Committee:

Over-all Chairperson- Leonila M. Tolentino

Chairperson- Nancy E. Duque

Members: Sheila Owano Penny Lane Vallejos Sheena Lucena

Jave Fiel Riza Meperanum

Time Keeper: Rommel Nonol Computer Operator: Jason Baltazar

Moderator: **Glyn Magbanua** 

No.	. Time		Project Title	Researchers
	Start	End		
1	9:30	9:40	Phenotyping and Morphological Evaluation of Durian Cultivars in the Philippines	Emma K. Sales
2	9:40	9:50	Conservation, Characterization of Durian Genetic Resources (Phase 2)	Romulo L. Cena
3	9:50	10:00	Pest, Disease and Nutrient Management of Organic Cacao	Purificacion O. Cahatian Adeflor G. Garcia Joan P. Sadoral Ronald Superioridad
4	10:00	10:10	Botanical Extracts from Locally Available Plants for the Control of Major Insect Pest of Cacao and Rice	Purificacion O. Cahatian
5	10:10	10:20	On-Site Evaluation and Identification of Superior Rambutan Trees Grown from Seeds in Selected Areas in North Cotabato for Variety Release and Registration	Nancy E. Duque Ariston D. Calvo
	10:20	10:40	OPEN FORUM	
6	10:40	10:50	Cacao-Coconut Intercropping System	Ariston D. Calvo
7	10:50	11:00	Cacao-Rubber Intercropping System	Romulo L. Cena
8	11:00	11:10	Cacao-Banana Intercropping System	Nenita E. Olero
9	11:10	11:20	Mungbean Productivity through Improved Cultural Management Scheme	Nancy E. Duque Ariston D. Calvo
10	11:30	11:40	Weed Management Scheme in Organic Peanut in Southern Mindanao	Nancy E. Duque
	11:40	12:00	OPEN FORUM	
	12:00	1:00	LUNCH BREAK	

# November 27, 2018 -Day 1 - Afternoon Session 1

Category: **Research Category**Venue : **Café Martina** 

Evaluators **Dr. Teresita B. Bayaron** 

Dr. Abonawas M. Pendaliday

Dr. Emmanuel P. Leaño

Rapporteur Committee:

Over-all Chairperson- **Leonila M. Tolentino** 

Chairperson- Nancy E. Duque

Members: Sheila Owano Penny Lane Vallejos Sheena Lucena

Jave Fiel Riza Meperanum

Time Keeper: Rommel Nonol Computer Operator: Jason Baltazar

Moderator: Rommel John Basan

No.	Time		Project Title	Researchers
	Start	End		
11	1:00	1:10	Validation of USM Research Output for the Past Five Years: A Knowledge Management System Initiative	Cayetano C. Pomares
12	1:10	1:20	Macropropagation an Alternative Technique of Producing Quality Lakatan Planting Material. Project 1. Field Technique of Producing Quality lakatan Suckers through False & Complete Decapitation	Nenita E. Olero Romulo L. Cena Ardniel A. Baladjay Ariston D. Calvo
13	1:20	1:30	Project 2. Detached Corm Technique: An Alternative Macropropagation for Lakatan	Nenita E. Olero Romulo L. Cena Ardniel A. Baladjay Ariston D. Calvo
14	1:30	1:40	Fermentation Methods Roasting Techniques and product Development in Coffee	Mark Al-Jamie J. Muttulani
15	1:40	1:50	Ethobonatical Survey of Medicinal Plants in North Cotabato	Lydia C. Pascual
	1:50	2:10	OPEN FORUM	
16	2:10	2:20	Technology Options and Packaging of USM NCH 33 and 35 Yellow Corn Hybrid Production	Antonio P. Pasig Ferdinand A. Duldulao
17	2:20	2:30	Mabolo Fruit ( <i>Diospyrus blancoi</i> ) Its Utilization and Potential for Production of Fruit Wine	Rhett Sean Pomares Dennis Muyco
18	2:30	2:40	Optimum Fertilization to Enhance Yield and quality of Fresh Durian in Southern Mindanao	Flora P. Nicor
19	2:40	2:50	Performance Evaluation Of Peanut-Mungbean (NCT in field legumes)	Nancy E. Duque
20	2:50	3:00	Graftability and Subsequent Nursery and Field Performance of Mangosteen Graftage (2 comp.)	Ariston D. Calvo Nancy E. Duque Marisa E. Garcia

	3:00	3:20	OPEN FORUM	
21	3:20	3:30	On-Farm Promotional Demo Trials for USM Yellow Corn Hybrids NCH 33 and 35 in Southern Mindanao	Antonio P. Pasig
22	3:30	3:40	Corn R & D Program: Enhancing Yield Potential in corn through Exploitation of Heterosis	Efren E. Magulama Romulo L. Cena Nenita E. Olero Sheena B. Lucena
23	3:40	3:50	Optimum Nutrient Requirement to Enhance Productivity of Mangosteen, Lanzones and Rambutan	Ariston D. Calvo Nenita E. Olero
24	3:50	4:00	Evaluation of Different Pummelo Cultivars Commercially Grown in the ASEAN under Mindanao Condition	Marisa E. Garcia
25	4:00	4:10	Reduction of Immaturity Period of Newly Established Rubber Clones through Covercropping, Fertilization and Advanced Planting Materials	Antonio P. Pasig Nenita E. Olero
	4:10	4:30	OPEN FORUM	

## November 28, 2018 - Day 2- Morning Session 1

Category: **Research Category**Venue : **Café Martina** 

Evaluators **Dr. Teresita B. Bayaron** 

Dr. Abonawas M. Pendaliday Dr. Emmanuel P. Leaño

Rapporteur Committee:

Over-all Chairperson- **Leonila M. Tolentino** 

Chairperson- Nancy E. Duque

Members: Sheila Owano Penny Lane Vallejos Sheena Lucena

Jave Fiel Riza Meperanum

Time Keeper: Rommel Nonol Computer Operator: Jason Baltazar

Moderator: **Arlene Riogelon** 

No.	Time		Project Title	Researchers
	Start	End		
26	8:00	8:10	Use of Bio Ferilizers for Sustainable Cocoa Production	Leonila M. Tolentino
27	8:10	8:20	Comparative Study Performance of Five Clones of Seedlings Intercrop in 3-Year Old Oil Palm Mini Plantation	Sahabuddin Maindan Romulo L. Cena
28	8:20	8:30	Exploration and Evaluation of Indigenous Plants from Mindanao with Pro- and Anti- angiogenic and Anticancer Properties	Lydia Pascual
29	8:30	8:40	Determinants of Adoption of Solar Photovoltaic Technology for Households	Jeffrey Gorre
30	8:40	8:50	Comparison and Evaluation of Linear Static And Dynamic Seismic Analysis of Selected USM Building	B. Aznar
	8:50	9:10	OPEN FORUM	
31	9:10	9:20	Identification and Molecular Profiling of Oil Palm Varieties and Hybrids towards Oil Palm Varietal Improvement in the Philippines	Edward A. Barlaan
32	9:20	9:30	Functional Genomics Assisted Development of Gene Markers for Economically Important Traits in Cacao Production & Varietal Improvement	Edward A. Barlaan
33	9:30	9:40	Functional Genomics Assisted Development Gene Markers for Economically Important Traits in Rubber Production & Varietal Improvement	Emma K. Sales
34	9:40	9:50	Phenotypic and Genotypic analysis of Coffea canephora (Robusta) Using Morphological and Molecular Markers	Emma K. Sales Harem R. Roca
35	9:50	10:00	Molecular Identification and Detection of Microbial Pathogens in Banana	Edward A. Barlaan
	10:00	10:20	OPEN FORUM	

36	10:20	10:30	Productivity Enhancement and Utilization of Oil Palm by- Products in Central Mindanao	Leo Gayao
37	10:30	10:40	Enhancing Nurseries of Promising Rubber Clones	Adeflor G. Garcia
38	10:40	10:50	Performance Evaluation of Oil Palm Hybrids in Different Agro-Ecological Condition in Mindanao	Marisa E. Garcia
39	10:50	11:00	Performance Evaluation of Twenty Five Promising Cacao Clones derived from ASIAN Countries	Sheena Lucena Romulo L. Cena
40	11:00	11:10	Comparative Performance of Hainan and Native Varieties of Black Pepper Using Different Trellis and Type of Planting Materials	Sheena Lucena Romulo L. Cena
	11:10	11:30	OPEN FORUM	
41	11:30	11:40	Fermentation Methods, Varietal Combination & Roasting Techniques in the Processing of Cacao	Lorylyn Joy Turnos
42	11:40	11:50	Harnessing Insect Bat Ecosystem Service for Economical Rice Production (Y1)	Ma. Teodora N. Cabasan
	12:00	1:00	LUNCH BREAK	

## November 28, 2018 - Day 2 - Afternoon Session 1

Category: Research Category

Venue : Café Martina

Evaluators **Dr. Teresita B. Bayaron** 

Dr. Abonawas M. Pendaliday

Dr. Emmanuel P. Leaño

Rapporteur Committee:

Over-all Chairperson- Leonila M. Tolentino

Chairperson- Nancy E. Duque

Members: Sheila Owano Penny Lane Vallejos Sheena Lucena

Jave Fiel Riza Meperanum

Time Keeper: Rommel Nonol Computer Operator: Jayson Baltazar

Moderator: Renel Alucilja

No.	Time		Project Title	Researchers
	Start	End		
43	1:00	1:10	Effects of Pest Diseases Biocontrol & Weather on the Phytochemical Production of Coffee & Cacao in Mindanao	Naomi G. Tangonan Conrado C. Evangelista Maria Irenea S. Candolita Willie Jones B. Saliling Melesa M. Prado Keith Bryan V. Marcelino Sheila Mae L. Tomonas
44	1:10	1:20	Management of 2 Major Diseases of Banana using Eight Commercial Bioformulation/Biopesticides	RCJan B. Evangelista
45	1:20	1:30	Nutritional Analysis of Indigeneous Vegetables & Wild Edible Fungi as Affected by Occurrence of Pests Diseases & Weather Factors	Naomi G. Tangonan Maria Irenea S. Candolita Jigzcel Devine F. Basoy Willie Jones B. Saliling Elaine Genevive B. Parcon Fialili S. Zamora Khizzle S. Anos
46	1:30	1:40	Interspecific Grafting of Seedless Breadfruits "Rimas" ( <i>Artocarpus altilis</i> ) with other Artocarpus Species and Subsequent Nursery and Field Performance Graftage	Nancy E. Duque Ariston D. Calvo
	1:40	2:00	OPEN FORUM	
47	2:00	2:10	Vulnerability Adaptation of Rubber Production in Response to Climate Change in Region XII	Lorna G. Valdez
48	2:10	2:20	Identifying Suitable Sites for Small Scale Irrigation Projects in Region XII through GIS Based Water Resources Assessment	Willie Jones Saliling
49	2:20	2:40	Evaluation of Climate Change Adaptation Strategies and Capacities of Small-Scale Farmers on Farm Labor Patterns and Productivity	Leorence Tandog
50	2:40	2:50	Evaluation of Laboratory Methods Using Low Cost Facilities in Determination of DRC and DIRT Content	Stella P. Ocreto
51	2:50	3:10	Volume and Production of Banana Stalks and Water Lily and their Utilization as Feeds for Goats	Josephine R. Migalbin

	3:10	3:20	OPEN FORUM	
52	3:20	3:30	Morphological, Productive and Reproductive Characterization of Native Chicken in Region XII	Elsa A. Gonzaga Elizabeth C. Molina Rolando J. Garduque Carlito Sanchez
53	3:30	3:40	Enhancing Poultry Organic Production System (3 comp.)	Milagrina P. Pomares
54	3:40	3:50	Assessment of the Major-Eco Tourism Sites in SOCCKSARGEN	Rosyell Angelo Piosca
55	3:50	4:00	Beekeeping under Crop-Based Agro Ecosystem	Emiliana G. Batomalaque
56	4:00	4:10	Bioremediation of Lead Contamination using Asteraceae Plants	Lydia P. Pascual Ronald Z. Pascual
57	4:10	4:20	Characterization and Utilization of Air Potato ( <i>Dioscorea bulbifera</i> ) Tuber	Estrella Dela Cruz Stella P. Ocreto
	4:20	4:40	OPEN FORUM	

# November 27, 2018 - Day 1 - Morning Session 2

Category: **Development Category**Venue : **Extension Conference Room** 

Evaluators **Dr. Naomi G. Tangonan** 

Dr. Elizabeth D. Malacad Dr. Lynn Esther E. Rallos

Rapporteur Committee:

Over-all Chairperson- **Leonila M. Tolentino** 

Chairperson- Janice M. Bangoy

Members: Kharlo Subrio Judy Ann Gregorio

Joe Ann Engada Abygail Sauyen

Arjay Guinita

Irish Fantillanan

Cristine Mediano

Time Keeper: Lovely Obello

Computer Operator: Monalyn Marimpoong

Moderator: Dianne Cristel Basilio

No.	Time		Project Title	Researchers
	Start	End		
58	9:30	9:40	Dissemination of Macro Propagation Techniques in the Production of Lakatan Banana Planlets	Ariston D. Calvo Ardniel A. Baladjay Nenita E. Olero
59	9:40	9:50	Dissemination of Information on the Proper Management of Lakatan Banana Disease in Cotabato	Ariston D. Calvo Ardniel A. Baladjay Nenita E. Olero
60	9:50	10:00	Optimization, Efficacy and Longterm Usage of Extracts from Shurbs and Tuba Seeds to Control Fruit Fly	Ariston D. Calvo Nenita E. Olero
61	10:00	10:10	Production Utilization, Processing and Product Development in Organically-Grown Herbs and Spices	Nenita Basilio Sandra Joy Pahm
62	10:10	10:20	Organic Feeds	Cayetano C. Pomares
	10:20	10:40	OPEN FORUM	
63	10:40	10:50	Enhancing Semen Biotechnology for Goat and Sheep	Cayetano C. Pomares
64	10:50	11:00	Development of Efficient Techniques on Tissue Culture Somatic Embryogenesis and <i>In-Vivo</i> and <i>In-Vitro</i> Propagation in Rubber	Harem Roca
65	11:00	11:10	Processing, Packaging and Commercialization of Freshwater Fishes: An Alternative Sustainable Source of Income for Housewives	Cyra Mae Escalera
66	11:10	11:20	Processing and Production of Fruit Wine	Agnes A. Rodulfa
67	11:20	11:30	Batasan Agro-Ecological Landscaping-Sustainable Land Use for Local Government Intervention	Cayetano C. Pomares Harem R. Roca John Aris Tabora Flora P. Nicor
68	11:30	11:40	Grain Blends: Towards Producing Good Cooking and Eating Quality	Rhodora Manceras
	11:40	12:00	OPEN FORUM	

## November 27, 2018 - Day 1 - Afternoon Session 2

Category: **Development Category** Venue : Extension Conference Room

Dr. Naomi G. Tangonan Evaluators

> Dr. Elizabeth D. Malacad Dr. Lynn Esther E. Rallos

Rapporteur Committee:

Over-all Chairperson- Leonila M. Tolentino

Chairperson- Janice M. Bangoy

Members: Irish Fantillanan **Kharlo Subrio Judy Ann Gregorio Arjay Guinita** 

Joe Ann Engada **Abygail Sauyen** 

**Cristine Mediano** 

Time Keeper: Lovely Obello

Computer Operator: Monalyn Marimpoong

Moderator: JM Json Bautista

	12:00	1:00	LUNCH BREAK	
No.	o. Time		Project Title	Researchers
	Start	End		
69	1:00	1:10	Development of Coffee-Based Beverages Combined with Tropical Fruits	Arlene Riogelon Irving Fajarito Edward A. Barlaan
70	1:10	1:20	Innovation of Root Trainer Technique & Precision Grafting Technology for Rapid Propagation of Quality Planting Materials of Rubber	Marisa E. Garcia
71	1:20	1:30	Revitilizing Abaca Industry through S&T Interventions for Higher Crop Productivity Using High Yielding Bunchy Top Resistant Abaca Hybrid	Harem Roca
72	1:30	1:40	Management of Rescued Wildlife: Fauna Livability and Adaptation	Cayetano C. Pomares Francisco Gil N. Garcia Alris John Calvo John Aris Tabora
73	1:40	1:50	Simulation Model Validation on Sheep-Oil Palm Integration Model (USM SOIM) at USM AVAS	Milagrina P. Pomares Cayetano C. Pomares Noe S. Mamon
	1:50	2:10	OPEN FORUM	
74	2:10	2:20	Detecting and Mapping Banana Diseases: Developing the Architecture for Image Processing	Maricel Dayaday
75	2:20	2:30	Innovative System in Advancing Halal Goat Production in Region XII & ARMM Project 1: Development of LAMP & Quick Test Kit to Haram Detective	Carlito Sanchez
76	2:30	2:40	Development of Organic Complete Ratio Mix (OCRM): Adaptation Processing & Commercialization for Organic Dairy Goat Production	Cayetano C. Pomares

77	2:40	2:50	Demonstration of Strategies to Limit Gastro-Intestinal Parasitism in Grazing Goats	Elizabeth C. Molina Alris John C. Calvo
78	2:50	3:00	Purification and Production of Native Chicken through Molecular Breeding	Cayetano C. Pomares
	3:00	3:20	OPEN FORUM	
79	3:20	3:30	Development of an ECE Reviewer Android App for ECE Students	Maricel G. Dayaday
80	3:30	3:40	Development of Electronic Data Filing and Retrieval System of University of Southern Mindanao Faculty and Staff	Ryan Gonzaga Arjay Agbunag Edward A. Barlaan
81	3:40	3:50	Technology Adaptation and Performance Trial of Recommended Rubber and Other Promising Rubber Clones in the Philippines	Romulo L. Cena
82	3:50	4:00	Pilot Testing & Validation of the Molecular Marker Diagnostic Kit for Durian Nurseries in Mindanao & Other Parts of the Philippines	Emma K. Sales
83	4:00	4:10	Pilot Testing and Validation of SSR Marker Kit for Philippine Mango Germpasm in Commercial Mango Nurseries	Emma K. Sales
	4:10	4:30	OPEN FORUM	

## November 28, 2018 - Day 2- Morning Session 2

Category: **Development Category**Venue : **Extension Conference Room** 

Evaluators **Dr. Naomi G. Tangonan** 

Dr. Elizabeth D. Malacad Dr. Lynn Esther E. Rallos

Rapporteur Committee:

Over-all Chairperson- Leonila M. Tolentino

Chairperson- Janice M. Bangoy

Members: Kharlo Subrio Judy Ann Gregorio Irish Fantillanan

Joe Ann Engada Abygail Sauyen Arjay Guinita

**Cristine Mediano** 

Time Keeper: Lovely Obello

Computer Operator: Monalyn Marimpoong

Moderator: Helen A. Macailing

No.	No. Time		Project Title	Researchers
	Start	End		
84	8:00	8:10	Establishment of Database Chemistry Students Research in USM, Kabacan, Cotabato	Stella P. Ocreto
85	8:10	8:20	Development of AVAS-USM as an Avenue for Community-Based Tourism	Mildred Samblaceño
86	8:20	8:30	Production and Utilization of Badjang Flour in Making Baked and Other Snack Food Products	Ivy Mar Cabornida
87	8:30	8:40	Utilization of Selected Local Fruits into Nata Production	Ivy Mar Cabornida
88	8:40	8:50	Development and Appropriate Processing Methods for Essential Oil Extraction	Stella P. Ocreto
	8:50	9:10	OPEN FORUM	
89	9:10	9:20	Cotabato Special Rice Project	Lope E. Dapun
90	9:20	9:30	Rehabilitation and the Application of GAP: A Way to Improve Productivity of Coffee under Rubber and Coconut in Region XII	Noe S. Mamon
91	9:30	9:40	Science & Technology Community Based Farm (STCBF) on Improved Nursing Mgt Budwood Gardens Establishment & Intercropping Schemes to Promote & Expand Rubber Farming in Mindanao	Gloria S. dela Peña
	9:40	10:00	OPEN FORUM	
			Prog. Smarter Approaches to Reinovigate Agriculture as an Industry in the Philippines (SARAI)-Phase II	
92	10:40	10:50	Proj. Phenology Studies, Crop Management and Model Development for Cacao	Maria Victoria O. Espaldon Calixto M. Protacio Romulo L. Cena

93	10:50	11:00	Proj. Using Crop Simulation Models for Issuing Crop Advisories to Farmers	Maria Victoria R. Espaldon Felino P. Lansigan Adeflor G. Garcia
94	11:00	11:10	Proj. Community-Level SARAI- Enhance Agricultural Monitoring System (SEAMS) and Dissemination of Crop Advisories	Maria Victoria R. Espaldon Moises A. Doradon Adeflor G. Garcia
95	11:10	11:20	Proj. Insect Pest & Diseases Advisory System	Maria Victoria R. Espaldon Purificacion O. Cahatian
	11:20	11:40	OPEN FORUM	
	12:00	1:00	LUNCH BREAK	

# November 27, 2018 - Day 1- Morning Session 3

Category: Non-AFNR (Social and Socio- Economics Category), Extension

Venue : **DD Clemente Hall** 

Evaluators **Dr. Violeta P. Bello** 

Dr. Purisima G. Bayacag Dr. Samsia I. Beduya

Rapporteur Committee:

Over-all Chairperson- **Leonila M. Tolentino** Chairperson- **Mary Grace Secretaria** 

Members: Josellee Aguirre Cromwell Jumao-as

Jonavelyn Turba Rezin Cabantug

Time Keeper: Ellain Sotto

Computer Operator: Michael James Abrea

Moderator: Jacinta T. Pueyo

No.	Т	ime	Project Title	Researchers
	Start	End		
96	9:30	9:40	Proficiency Program in Com Electronics Technology	Karlo Subrio
97	9:40	9:50	Faculty Profile of the University of the University of Southern Mindanao Its Implication to Retirement and Hiring	Anita S. Gelacio
98	9:50	10:00	The ULS Tracer Study of the Enhanced Science Curriculum 2008-2012 Graduates	Arabella Soberano
99	10:00	10:10	Factors Affecting the Performance in the Board Examination of ECE-USM Examinee	Maricel G. Dayaday
100	10:10	10:20	Analysis of the Alignment Between USM's Mathematics Programs the Students' Present Academic or Future Professional Needs	Debbie Marie Verzosa
	10:20	10:40	OPEN FORUM	
101	10:40	10:50	Istirja: Physchological, Intervention for the Muslim Filipino Survivors of Armed Conflict of Marawi Siege	Yusuf H. Indin
102	10:50	11:00	Assessment of Disease and Illness Incidence and Inventory of Drug, Medicines and Medical Supplies of USM Hospital	Merchia C. Mayormente
103	11:00	11:10	Economic Sustainability of Local Dish Culinary Innovations	Aldrin T. Alim
104	11:10	11:20	Fund Monitoring and Management System: A Knowledge Management Software for USM Research and Extension Office	Arjay S. Agbunag
105	11:20	11:30	Food Gaps, Knowledge, Attitude and Practices on Wash, Childcare, Health and Nutrition in PRRO Areas in Mindanao	Jigzcel Divine F. Basoy Urduja Nacar
	11:30	11:50	OPEN FORUM	
	12:00	1:00	LUNCH BREAK	

## November 27, 2018 - Day 1- Morning Session 3

Category: Non-AFNR (Social and Socio- Economics Category), Extension

Venue : **DD Clemente Hall** 

Evaluators **Dr. Violeta P. Bello** 

Dr. Purisima G. Bayacag Dr. Samsia I. Beduya

Rapporteur Committee:

Over-all Chairperson- **Leonila M. Tolentino**Chairperson- **Mary Grace Secretaria** 

Members: Josellee Aguirre Cromwell Jumao-as
Jonavelyn Turba Rezin Cabantug

Time Keeper: Ellain Sotto

Computer Operator: Michael James Abrea

Moderator: Julius Jerome Ele

No.	Ti	ime	Project Title	Researchers
	Start	End		
106	1:00	1:10	Vulnerability Assessment of Students Towards HIV AIDS	Aldrin T. Alim
107	1:10	1:20	Segmenting and Profiling Customer Preferences for Long Restaurant Profitability	Cheryl Y. Dulay
108	1:20	1:30	Corelates to the Level of Awareness, Understanding and Acceptability of the CAS VMGO	Jacinta T. Pueyo
109	1:30	1:40	Completion Rate and Correlates of LET Performance of Science Major Graduates of the College of Education	Hazel Ann Soriano Ellen Joy M. Farala
110	1:40	1:50	Faces of Diversity, Nurtures of Life's Bounty (Documentation and Publication of the Cultural Heritage of the Indigenous Peoples in Region XII)	Francisco Gil N. Garcia Emma K. Sales Amme Rose T. Blonto Lloyd Anton Von M Colita Michael D. Derla Magno M. Gonzalez Jr Michael F. Andres
	1:50	2:10	OPEN FORUM	
111	2:10	2:20	The Chemistry Mobile Educational Learning and Destination Project	Ma. Victoria T. Dapun
112	2:20	2:30	Health Status Profiling of USM and Staff	Marianne Meriales
113	2:30	2:40	Modified Katatagan: Building Resiliency for the Filipino Muslim Survivors with Post Traumatic Stress (PTS)	Yusuf H. Indin
114	2:40	2:50	Manobo: Indigenous Philisophy and Customary Laws	Maricar Juaneza Bonifacio Solsoloy
115	2:50	3:00	Attitudes Toward Sex and Reproductive Health Among Student	Abdulnasser Makalugi Kautin Kulano

	3:00	3:20	OPEN FORUM	
116	3:20	3:30	Communication Channel Used and Level of Effectiveness of the Double Barrel Projects Implementations in Region XII	Roviline Rapisura
117	3:30	3:40	Authentication of USM Chronicles	Dialica Caup
118	3:40	3:50	Pharmaceutical Qualification on Cultural Restriction: Influence of Porcine DNA on Knowledge, Attitude and Practice of Healthcare Professionals on Medication Therapy	Marianne Meriales
119	3:50	4:00	Amalgamation of the Cultural Activities of the Tagakaulo at Malungon Saranggani Province Into Indigenous People Educational Development Framework	Marlene Orfrecio
120	4:00	4:10	Assessing the Integration of Technology Into Teaching: The Case of Secondary School Teachers In Arakan, Cotabato	Vicky Grijaldo
	4:10	4:30	OPEN FORUM	

# November 28, 2018 - Day 2- Morning Session 3

Category: Non-AFNR (Social and Socio- Economics Category), Extension

Venue : **DD Clemente Hall** 

Evaluators **Dr. Violeta P. Bello** 

Dr. Purisima G. Bayacag Dr. Samsia I. Beduya

Rapporteur Committee:

Over-all Chairperson- **Leonila M. Tolentino** Chairperson- **Mary Grace Secretaria** 

on-going

Members: Josellee Aguirre Cromwell Jumao-as

Jonavelyn Turba Rezin Cabantug

Time Keeper: Ellain Sotto

Computer Operator: Michael James Abrea

Moderator: Lawrence Dollente

No.	Time		Project Title	Researchers
	Start	End		
Exte	nsion			
121	8:00	8:10	College of Agriculture: Agri-Mobile Clinic: Enhancing the Capability of Agriculture Technicians for Social Capability Mapping	Purificacion O. Cahatian Adeflor G. Garcia
122	8:10	8:20	Community Agenda of Rural Development (CARE)	Jacinta T. Pueyo
123	8:20	8:30	ICE to RISE: Intensifying Community Engagement Through Relevant instruction, Services and Extension	Ardniel A. Baladjay
124	8:30	8:40	School-based Community Sports Development Project	Norge Martinez
125	8:40	8:50	USM: Creating Culture of Food Safety in North Cotabato	Ma. Elena N. Tanabe
	8:50	9:10	OPEN FORUM	
126	9:10	9:20	Community-Based Sustainable Animal Disease Control Program	Elizabeth C. Molina Elsa A. Gonzaga Rolando J. Garduque
127	9:20	9:30	Collaborative Barangay Based Development and Economic Mainstreaming Phase II	Analyn Gonzales
128	9:30	9:40	Community-Based Ecotourism Project in Barangay Ilomavis, Kidapawan City	Rosyell Angelo Piosca
129	9:40	9:50	LITNUMBARCO: Literacy and Numeracy at Barangay Cuyapon, Kabacan	Kautin Kulano
130	9:50	10:00	Promotion of Science-Based Technologies for Rural Development	Moveta P. Balala
	10:00	10:20	OPEN FORUM	
131	10:20	10:30	Sustainable Livelihood Program: Basic Driving NC II	Solomon L. Presto
132	10:30	10:40	Skills Training for Employement/Livelihood	April Rose Flores
133	10:40	10:50	Driving with EngineTrouble Shooting Enhancement	Apolinario Dante

134	10:50	11:00	Community-Based Food Processing for Livelihood and Entrepreneurship in Kabacan, Cotabato	Jigzcel Divine Basoy
	11:00	11:20	OPEN FORUM	
Socia	al Resea	rch/Sc	ocio-Econ	
135	11:20	11:30	Assessment of Rabies Control Program in North Cotabato	Elizabeth C. Molina
136	11:30	11:40	Assessment of the Product and Marketing Strategies of Adlai and Dragon Fruit in Mindanao	Francisco Gil N. Garcia Romel John P. Basan Kathleen Ivy Bolotaolo Roy Gacus
137	11:40	11:50	Regional VCA and Investment Roadmap of Organic Rice	Rhenalie Bello
138	11:50	12:00	Assessment of Rice Farming Technology and System of Malitubog-Maridagao Project Beneficiaries	Rhenalie Bello Irving Fajarito
	12:00	12:20	OPEN FORUM	
	12:20	1:00	LUNCH BREAK	

## November 28, 2018 - Day 2- Afternoon Session 3

Category: Non-AFNR (Social and Socio- Economics Category), Extension

Venue : **DD Clemente Hall** 

Evaluators **Dr. Violeta P. Bello** 

Dr. Purisima G. Bayacag Dr. Samsia I. Beduya

#### Rapporteur Committee:

Over-all Chairperson- **Leonila M. Tolentino** 

Chairperson- Mary Grace Secretaria

Members: Josellee Aguirre Cromwell Jumao-as

Jonavelyn Turba Rezin Cabantug

Time Keeper: Ellain Sotto

Computer Operator: Michael James Abrea

Moderator: Ardniel A. Baladiav

No.	Time		Project Title	Researchers
	Start	End		
139	1:00	1:10	BSE LET Performance for the Last Six Years (2009-2015) Across Major Fields	Eimer Estilloso
140	1:10	1:20	Evaluation of the Effectiveness of Mainstreaming the DDR Concepts in Basic Education Curriculum in Region XII	Eimer Estilloso
141	1:30	1:40	Pilot Testing of Counselling Manual for USM Guidance Councellors	Yusuf H. Indin
142	1:40	1:50	Determinants of the Licensure Examination Performance of the Graduates of the College of Veterinary Medicine-University of Southern Mindanao	Emerlie Okit
143	1:50	2:00	Biosafety and Biosecurity Awareness Among University Students	Lydia C. Pascual
	2:00	2:20	OPEN FORUM	

144	2:20	2:30	Employability of University of Southern Mindanao	Riceli Mendoza
			Graduates	
145	2:30	2:40	DA Regional Field Unit XII for the Implementation of Various Pilots Projects & Support Services of the DA- Information and Communications Technology Services (DA-ICTS)	Alberto Arellano
146	2:40	2:50	Client Satisfaction Evaluation of the University of Southern Mindanao Agricultural Research Center (USMARC) Central Analytical Laboratory	Flora P. Nicor
147	2:50	3:00	Farming Methods & Health Assessment of Farmers in North Cotabato (Local Capability) Building for Agriculture and Occupational Health Surviellance in Framing Communities.	Emma K. Sales
148	3:40	3:50	Short Firearms' Muzzle Pressure and Its Effect in Hitting The Target	Rolly Sotto
	3:00	3:20	OPEN FORUM	
149	3:20	3:30	Mom Too Soon: Status and Challenges of Teenage Mother at USM	Jacinta T. Pueyo
150	3:30	3:40	Survey on the Different Halal Practices of Different Tribal Groups in Region XII	Salik Makakena Khadiguia Balah
151	4:10	4:20	Extent of Awareness on Halal Food Awareness Among Muslims Students Consumers of University of Southern Mindanao	Nasrudin Datucali
152	4:20	4:30	Baseline Study on Implementation of Multi-Lingual Education in District II Kidapawan City	Mercedes Centillo
	4:30	4:50	OPEN FORUM	

# Closing Program

Café Martina, USM, Kabacan, Cotabato November 29, 2018 8:00 AM

Presentation of Synthesis

Session I Dr. Nancy E. Duque

Session II Ms. Janice M. Bangoy

TS II

Session III Ms. Mary Grace Secretaria

EPS I

Presentation of Output for

Research

Director, USMARC

Presentation of Output of

Extension

Dr. Ardniel A. Baladjay **Director for Extension** 

Dr. Romulo L. Cena

Presentation of Output College-

**Based Researchers** 

Dr. Edward A. Barlaan Director for Research & **Development Services** 

Presentation of Output for PICRI

Researches

Prof. Harem R. Roca Director, PICRI

Presentation of RDE Outputs

**Dr. Cayetano C. Pomares** 

Dr. Francisco Gil N. Garcia

VP for RD & E

Acceptance of RDE Outputs

**SUC President IV** 

Awarding of Best Papers, Best Poster and JARDET Logo

Competition

Dr. Francisco Gil N. Garcia

**SUC President IV** 

**Dr. Cayetano C. Pomares** 

VP for RD &E

**Distribution of Certificates** Dr. Francisco Gil N. Garcia

**SUC President IV** 

Dr. Cayetano C. Pomares

VP for RD & E

Dr. Francisco Gil N. Garcia Closing Message:

**SUC President IV** 

Closing Prayer: Mr. Karlo Subrio

**EPS II** 

Master of Ceremony

**Dr. Donnie Tulud** Faculty, CAS

# 38<sup>th</sup> Agency In-House Review Working Committees November 27-29, 2018

Venue: Café Martine, DD Clemente Hall, URESC Conference Hall

Coordinator Dr. Edward A. Barlaan

Co-coordinator

#### **Executive Committee**

Chairperson Dr. Francisco Gil N. Garcia

Dr. Lope E. Dapun

Dr. Cayetano C. Pomares Dr. Romulo L. Cena Dr. Edward A. Barlaan Dr. Ardniel Baladjay Dr. Harem R. Roca Prof. Efren E. Magulama

#### **Program and Certificate Committee**

Chairperson Genghis Khan P. Manero

Co-chairperson Jasmin A. Pecho Members Grace Samulde

Liezel Gray Oria Amy Elivazo

#### Invitation committee

Chairperson Edward A. Barlaan Co-chairperson Ardniel A. Baladjay Members Salvador Inocencio

Adeflor Garcia

#### **Registration and Ushering Committee**

Chairperson Leanne Jay Manceras Co-chairperson Amancio Manceras

Members Cyrelle Besana Sharmaine Unos Sheryl Mae Roy

Genalyn Galas Gemarie Jaspe
Mary Claire Venturado Jeanie Binaohan
Avigel Cabrillos Jomarie Abubakar

#### **Documentation Committee**

Chairperson Roviline Rapisura
Co-chairperson Jacinta Pueyo
Member: Session 1 Melesa Prado

Session 2 Ellaine Genevive Parcon

Session 3 Jave Fiel

Anton Von Colita and MinTech

#### **Secretariat and Proceeding Committee**

Chairperson Nenita E. Olero

Co-Chairperson Marry Grace Secretaria

Members Regine Nabua

Regine Nabua Lovely Obello Liezel Oria Grace Samulde Sunshine Lacsao Melesa Prado

Michael James Abrea Monalyn Marimpoong

#### **Rapporteur Committee**

Over-all Chairperson Leonila M. Tolentino
Chariperson Session 1 Nancy E. Duque
Chariperson Session 2 Janice M. Bangoy
Chariperson Session 3 Marry Grace Secretaria

Moderators: Session 1 (AFNR - Research) Session 2 (AFNR- Development)

Session 3 (Extension, Social and Socio-Economic Researches)

Day 1

AM Glyn Magbanua PM Rommel John Basan AM Dianne Cristel Basilio PM JMJson Bautista AM Jacinta T Pueyo PM Julius Jerome Ele

Day 2

AM Arlene Riogelon PM - Renel Alucilja
AM Helen Macailing PM - Jalaloden Marohom
AM Laurence Dollente PM - Ardniel Baladjay

Day 3

AM Pia Amabelle Flores AM Marichu Calixtro AM Mitch Alba

#### **Encoders**

Day 1 Sheila Owano Kharlo Subrio Joellee Aguirre
Pennylane Vallejos Joe Ann Engada Jonavelyn Turba
Jave Fiel Judy Ann Gregorio Cromwel Jumao-as
Riza Meperanum Abygail Sauyen Rezin Cabantug
Sheena Lucena Irish Fantilanan Rommel John Basan

**Computer Operators** 

Day 1 Rommel Nonol Monalyn Marimpoong Michael James Abrea

## **Time Keeper**

Day 1 Jason Baltazar Lovely Obello Ellain Sotto

## Hall Preparation, Stage Decoration, Tarpaulin and Restoration Committee

Chairperson Moreno Java
Co-Chairperson Ferdinand Duldulao

Members Norge Martinez Mercedes Nicor

Vinus Java Jerome Elumbaring Marichu Calixtro Marlon Mancera Elpidio Arias Jeannie Duka

Malony Martinez Cris Harvin Rey Calvo

Leo Gayao Clark Maarat Ryan Balbuena Ariel Vallejos

#### **Food and Accomodation Committee**

Chairperson Shirl M. Bebit Co-Chairperson Cheryl Y. Dulay Members Agnes Rodulfa

1embers Agnes Rodulfa Joan Duran Ivy Mar Cabornida Ella Angco

> Aldrin Alim Urduja Nacar

#### **Honorarium and Token Committee**

Chairperson Purificacion O. Cahatian

Co-Chairperson Julius Jerome Ele Members Amy Elivazo Grace Samulde

#### **Audio Visual Equipment Committee**

Chairperson Judy Garcia
Co-Chairperson Antonio Pasig
Ryan Gonzaga

Ildefonso Seguritan

Members Mario Rentuaya ICTC Technical Group c/o Macoy

Clarence Dave Galas

#### **Transportation and Electricity Committee**

Chairperson Benjamin Fortinez Co-Chairperson Eugene Mars Abril

Members Ruby Paquit

Sadylie Pelle Allan Morgan

#### **Finance Committee**

Chairperson Bernabe B. Mondia
Co-Chairperson Helen B. Edano
Members Elma R. Elevazo

Quennie L. Durendes

#### **Paper and Poster Award Committee**

Chairperson Mary Joy Canolas
Co-Chairperson Marissa Garcia
Members Monaira Sumael

Richer Tiad

Stephen Dave Dupo

#### **Security Committee**

Chairperson Orlando B. Forro
Co-Chairperson Abdulamin H. Janani

EMCEE Khadiguia Balah - Opening Program

**Donnie Tulud** - Closing Program

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Musical Arrangement by Prof. Ruth Ellinor L. Cannen Lyrics by Prof. Ruth Ellinor L. Cannen and DR. Teofilo C. Dela Cruz

USM Beloved!
School so brave and true.
Shines her love for truth and beauty,
May she ever live to serve.

USM Beloved!
To thy name we sing,
Faithful shall we be to thee,
All one body, we.

Loyal shall we ever be Alma Mater, dear Let her spirit guide us, Towards life's highest goal.

#### Refrain:

We pledge to thee
Our love and loyalty
In our hearts for aye!(2x)
USM Beloved!
Fount of knowedle great,
Flows her love for highest goodness,
We shall cherish ever more.

Be our inspiration, Live within each heart, As in life we'll do our part with thy spirit serve...

God and land and fellowmen
Truth and freedom bring;
Hear our voices ringing,
Hail, our USM!

(Repeat Refrain)

#### VISION

USM envisions upholding its status of excellence in Research and development by continuing to be the pioneer source of technology and information that are on track towards poverty reduction, food security, and global competitiveness for cohesive and sustainable development among its multi-socio-cultural clienteles.

#### **MISSION**

To put into operation a system to undertake multi-disciplinary approach for R & D activities to ensure that technologies and information generated can address the prevailing concerns and issues in the local, regional and national levels for sustainable development.

#### **GOALS**

- Improve the system with scientific excellence through collaborative and interdisciplinary R&D activities that are anchored on the University's vision/mission;
- Conduct researches and generate technologies that could provide solutions and address the local, regional, and national concerns and issues;
- Provide a mechanism to ensure that research results be effectively and efficiently delivered to the clients for utilization and commercialization; and
- Build up resource generation facilities for continuous and sustainable R&D programs that are geared towards ensuring food security, global competitiveness, socio-cultural responsiveness that eventually improve the quality of life of the clienteles.



USM RD&E In-House Review 2018