## **Waste Management Meeting**

Silliman University March 8, 2019





## Note on Sequencing (Critical Path Analysis)

- Parts of the physical infrastructure (labelled bins) & organizational infrastructure (designation of environmental champions and environmental summit)
  - must be completed before ...
  - Key behavior change activities (training)
  - Follow-up monitoring (waste segregation) assessment, waste analysis and characterization)
    - Waste assessment is needed to set targets and milestones

ACTIVITY	N	D	J	F	M	Α	M
PHYSICAL INFRASTRUCTURE							
Finalize design of bin labels							
Print labels							
Distribute bins with labels							
Test segregated collection and transport; train janitors on segregated collection &							
transport							
Develop plans on composting							
Develop cost estimates							
Meeting with provincial DA composting specialist Joshua Demerre							
Set-up and implementation at College of Agri							
Develop plans and cost estimates for Phase 2							
Construction and implementation							
Expansion for revenue generation							

ACTIVITY	N	D	J	F	M	Α	M
ADMINISTRATIVE INFRASTRUCTURE							
BOT Approval of policies, public announcements							
Written Roles/Responsibilities of Environmental Champions							
Planning and Reporting Template							
Memo: Designate environmental champions							
Environmental summit							
Monitoring & Evaluation (see separate section)							
CURRICULUM DEVELOPMENT							
Data gathering (Service Learning, existing courses, existing research, etc.)							
Draft basic competencies, consultation, finalize							
Survey of awareness, perception, attitude							
Integrate into curriculum and/or enhance							
Repeat survey, improve as needed		Ų	1\_1				1 1

ACTIVITY	N	D	J	F	M	A	M
IEC CAMPAIGN							
Website plans							
Social media campaign							
Smart TV							
Banner on SU's ZW/BFFP advocacy							
Launch contests							
Design education posters on segregation							
Print and distribute posters							
Conduct training of trainers							
Experiential interactive training for all							
Additional targeted IEC based on results of monitoring, reporting, surveys, etc.							

ACTIVITY	N	D	J	F	M	Α	M
MONITORING AND EVALUATION							
Baseline segregation assessment							
Waste assessment and brand audit (WABA)							
Bin monitoring, corrective action							
Follow-up training (see IEC Campaign section)							
Repeat assessments							
Announce results							
Awards, recognitions							
Review, adjust policies, guidelines; set targets							





BUILDING COMPETENCE, CHARACTER & FAITH

# Essential Next Steps: Who will take the lead/be responsible? When is the target date?

- Complete distribution of labelled bins
- Designation of environmental champions
- Environmental Summit
- Intensify IEC campaign



## Curriculum Development

- Minimum Requirements/Core Competencies
  - Basic knowledge, attitudes, skills and habits (KASH) that all students should have in relation to sustainability, environmental protection, stewardship, etc.
- Enhancements
  - Expanding the basic knowledge and skills specific to one's field of study and field of research
  - Expanding KASH specific to service learning

- Knowledge awareness of the facts and concepts about a subject; cognitive processing of information, easier to measure
- Attitude way of thinking or feeling about a subject which reflects values, appreciation and motivation towards the subject; difficult to measure
- Skills ability to perform an activity or task as an application of knowledge related to a subject; easier to measure
- Habits tiny individual choices and behaviors repeatedly done with little or no effort; can be observed

#### Knowledge

- Based on the 7 environmental principles
  - Ours is a finite earth
  - Everything is connected to everything else
  - Everything must go somewhere
- Based on international norms
  - Principle of prevention
  - Precautionary principle
  - Polluter pays principle



### Knowledge

- Based on the sustainable development goals
  - Sustainability and the social equity principle
  - Clean water, clean air, sanitation, clean energy, sustainable cities
  - Sustainable consumption and production, prevention of waste and plastic/chemical pollution
  - Global climate change, climate mitigation and adaptation
  - Conservation of aquatic and terrestrial ecosystems; prevention of biodiversity loss

#### Attitude

- From the 7 environmental principles
  - Nature is beautiful (appreciation of nature)
  - All forms of life are equally important
  - We are stewards of God's creation
- From international norms
  - Duty of care principle
- Global solidarity (going beyond self; concern for community, country, and the world)
- Inter-generational solidarity (concern for future generations)
- Act locally (involvement, service)



#### Skills

- Ability to segregate at source
- Ability to recycle
- Ability to compost biodegradable waste
- Ability to conserve water
- Ability to conserve energy
- Ability to plant and green the environment
- Ability to be resilient to disasters (disaster preparedness)



#### Habits

- Picking up trash and recycling or proper disposal
- Segregation at source
- Consumer choices to reduce waste and environmental protection
- Conserve natural resources (e.g., water) and energy



- Engineering and Design
  - K: industrial pollution control, renewable energy;
     S: design of a wastewater treatment system
- Public Health
  - K: environmental health risk assessment; S: research on the impacts of air pollution
- Agriculture
  - K, S: sustainable farming; climate mitigation and adaptation in agriculture; composting and vermicomposting methods

- Mass Communication
  - K: environmental journalism; S: investigative reporting on environmental issues
- Performing and Visual Arts
  - K, S: environmental art
- Basic Education
  - K, S: environmental education
- Public Administration/Governance
  - K: UN and Philippine SDGs



- Literature, Literary Studies, English, Creative Writing
  - K: environmental literature, ecocriticism, literature and ecology, etc.
- Sociology
  - K: environmental sociology, environmental anthropology
- Medicine, Pharmacy
  - K,S: management of infectious and pharmaceutical waste



- Inter-disciplinary research
  - Environmental psychology and environmental journalism
  - Environmental toxicology in environmental science, in public health, and in agriculture
  - Environmental literature and environmental art
  - Agriculture, engineering and environmental science on large-scale vermi-composting of urban biodegradable waste