

Ministry of Science and Technology

Department of Technical and Vocational Education and Training(DTVET)

Government Technical Institute (Myingyan)

Green Innovation: Fostering Sustainable Entrepreneurship for a Green Economy

Thida Swe

Principal

Government Technical Institute(Myingyan)

Myingyan District, Mandalay Region

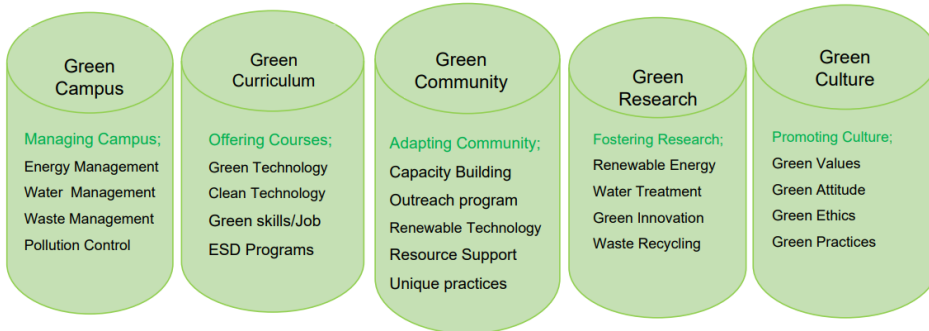
Myanmar

Outlines

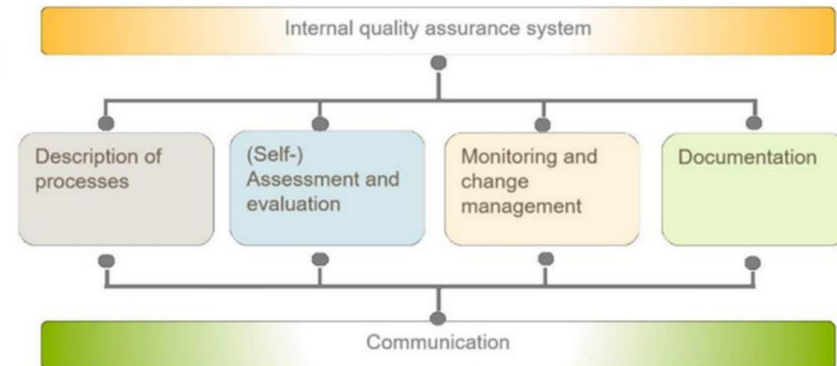
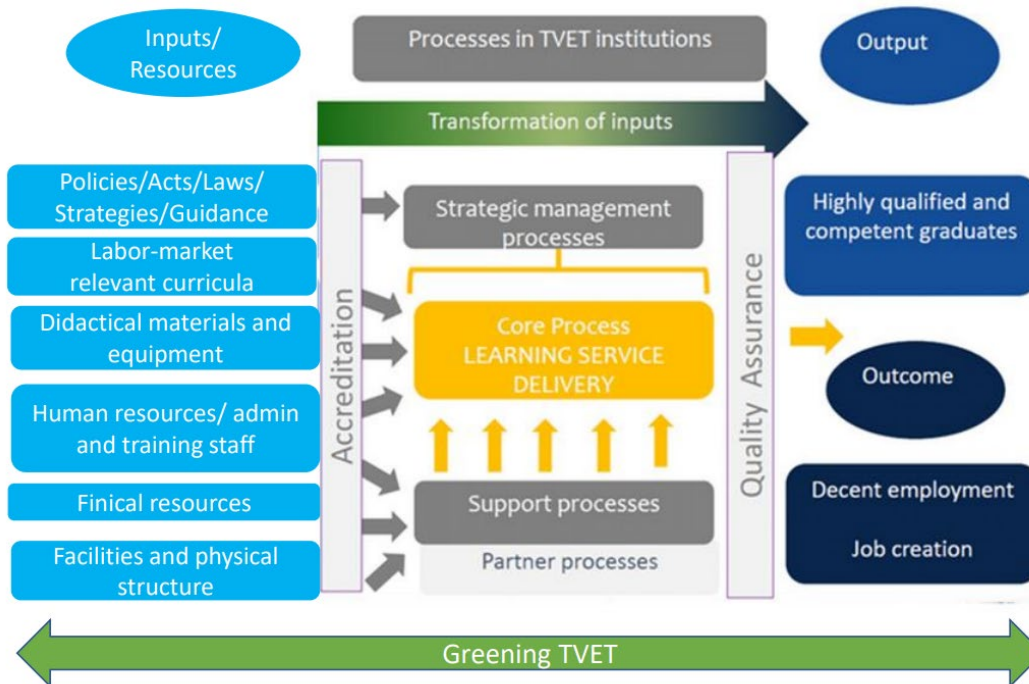
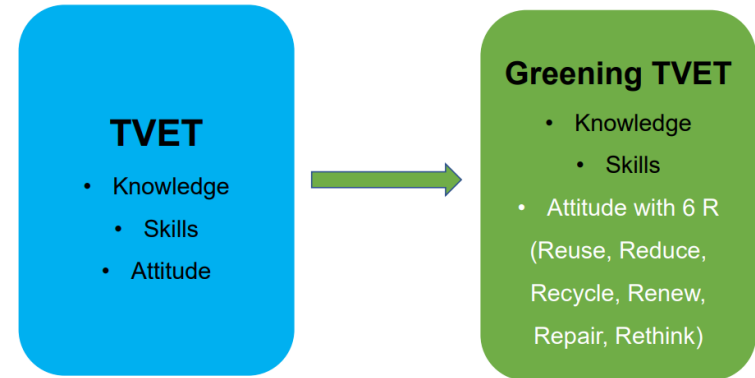
- ❑ Integrating The Greening TVET Initiative Practice in TVET Institution
- ❑ Innovative Project Competitions
- ❑ Entrepreneurial Learning Plan

Integrating The Greening TVET Initiative Practice in TVET Institution

Five Dimensions of Greening TVET



Paradigm Shift in TVET



Innovative Project Competitions

Organic waste to value initiative – Ash from rice husk application for the grassroots

Objective

- ☐ Reduce pollution
- ☐ Cost-efficient
- ☐ Enhance grassroots support
- ☐ Replicate other TVET institutions



Preparing and Collecting

- ☐ Ingredient – Ash from rice husk, lime, sand, cement
- ☐ Mold
- ☐ Concrete Mixer

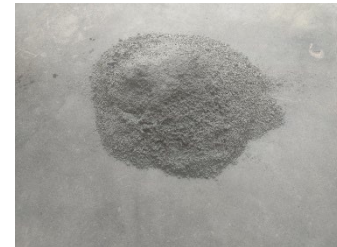
Process

- Mixing ash with aggregate (crush stone) to be powdered and filter it.
- Mixed Ash powder, lime and sand for two minutes
- Pour Cement and water and mixed for four minutes



Mixed – 1:1:3:3 (Cement: Lime: Sand : Ash)

1:1:3:6 (Cement: Lime: Sand : Ash)





- Forming in the mold





- Dry under the sun and room temperature

Testing Water Absorption

24 hours in water



$$\text{Water absorption} = \frac{M_2 - M_1}{M_1} \times 100$$

$$= \frac{7.66 - 6.42}{6.42} \times 100$$
$$= 19.31 \%$$

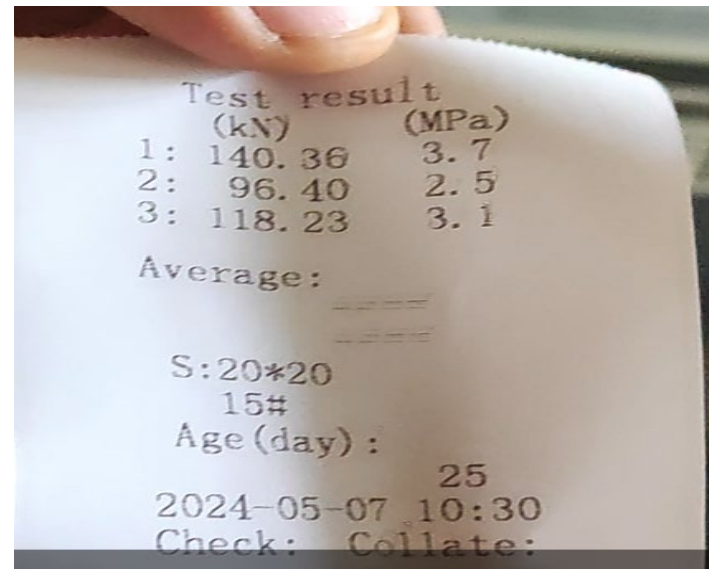
Less than 20% can be applied.



Compressive Strength Test



Average= 3.1 Mpa



Comparison of Compressive Strength Test Result

(1:1:3:6)

Age (Days)	KN	N/mm2
3	38.65	1.53
7	48.77	1.93
15	66.48	2.63

(1:1:3:3)

Age (Days)	KN	N/mm2
3	48.83	1.93
7	56.93	2.25
15	118.33	3.1

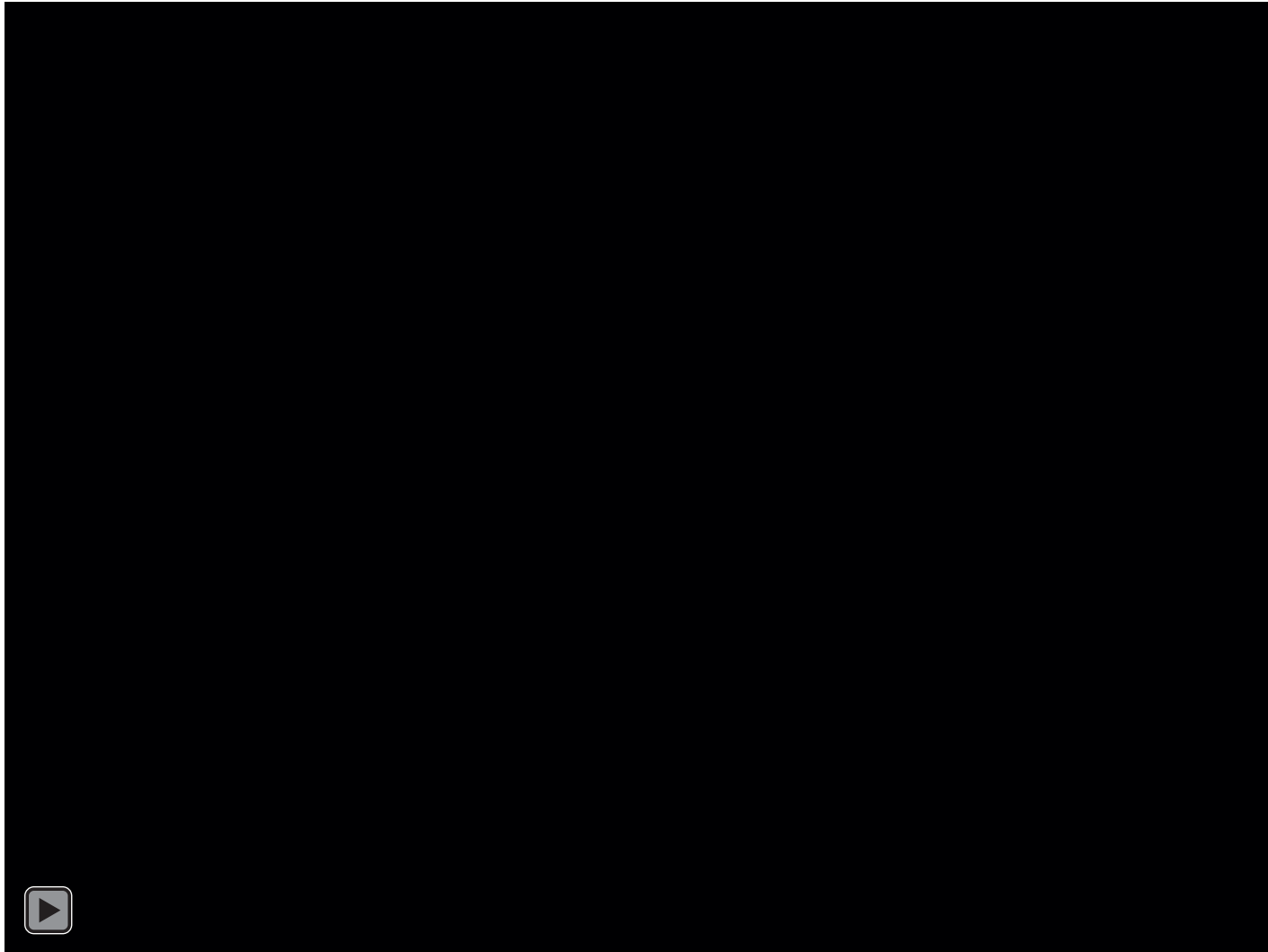
Comparison of other bricks

Type	Strength	Water Absorption	Weight	Price
Clay Brick	3.9 N/mm2	< 20% (7.29%)	2.6 kg	750 ks
Concrete Brick	3.2 N/mm2	<10 % (9.3%)	3.1 kg	700 ks
Ash Brick	3.1 N/mm2	<20 % (19.31%)	2.5 kg	200 ks

Sound Test



Field Test



Free flow From 3 feet height

Ash Brick Laying



Benefits

- Cheap
- Light weight
- Reduce CO2
- Reduce water
- Increase family income



8'x6' ash brick wall





**Plastic waste
to value
initiative
(Plastic Road)**





Blind Stick (to sense interference with sound buzzer)





2in 1 Metal Folding Table and Shelf



Mini Solar Energy Efficient Building (20W)

Entrepreneurial Learning Plan

- New curriculums have been reforming for three year diploma courses and start implementing it for first year in 2024-2025 academic year (Semester 1, Semester 2), 2025-2026 academic year for second year (Semester 3, Semester 4), 2026-2027 academic year for third year (Semester 5, Semester 6)
- **Entrepreneurship Development and Project Management will be delivered in third year (Semester 5).**
 - Formal concept developed
 - is integrated into everyday teaching and involve all stakeholders
 - Accessible to all students
 - Platforms for exchange
 - Students are responsible for devising projects with teachers as consultants
 - Students run a real business with or without cooperation with outside establishments
 - Resources access to various tools and materials to support learners working on a variety of project
 - Teachers/trainers has foundational knowledge of entrepreneurial learning
 - Teachers/Trainers give learners autonomy within work-related projects and hands-on experience
 - School culture respects learners' autonomy and creative work which is supported and celebrated by school leaders
 - Some initiatives promoting awareness of green entrepreneurship
 - Implements targeted program to empower marginalized groups through entrepreneurship

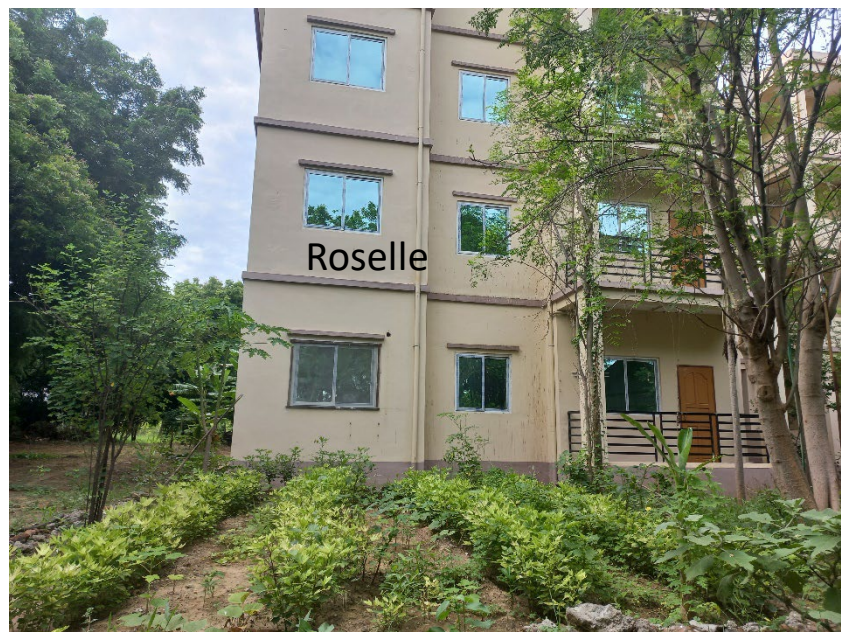
For Digital Entrepreneurship, our school Offer three years Information Technology Diploma Course including Web Design, Web Development Technology PHP, C Programming/C++/ C# Programming

- Success Stories of graduated Students : Web Developer, Develop Application Software, Programmer with programming language, Network Security in national and international.

Backyard of the Staff Housing



Vegetables



Roselle





Backyard of the Staff Housing



Backyard of the Staff Housing

Let us learn together, Let us make it green!



THANK YOU FOR YOUR KIND ATTENTION