

Maldives National Skills Development Authority



National Competency Standard for Waste to Wealth

Standard Code: SOCS02V1/21

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FOREWORD

Formal Technical and Vocational Education & Training (TVET) was introduced in the Maldives in 1975, with the establishment of the state-owned Vocational Training Center as the one and only TVET provider. As the institution and training programs evolved and need for standardized training materials grew, in 2006, government established a TVET mechanism to develop Occupational Standards.

Since then, Maldives' TVET system has evolved to encompass a public Polytechnic, a dozen private Institution Based Training (IBT) providers and several Employer Based Training (EBT) providers for apprenticeship training too. Additionally, as the regulatory body, under the Higher Education and Training Act 7/2021, Maldives National Skills Development Authority (MNSDA) was created on 16th May, 2021.

MNSDA's mandates includes:

- Developing policies, procedures and making regulations;
- Developing National Competency Standards, curriculums and related materials;
- Conducting National Apprenticeship Program (NAP) through EBTs,
- Conducting National Trade Testing and Certification (NTTC),
- Registering IBT and EBT providers and TVET programs;
- Conducting National Assessments and issuing National Certificates and
- Manage a comprehensive database comprised of IBT and EBT;

As a result, MNSDA has expanded TVET services with currently available 103 NCS covering a wide range of occupations while 71 new NCS are in the development process funded by the Maldives Enhancing Employability and Resilience of Youth (MEERY) project. In addition, MEERY assists for renewal of 53 existing NCS as well as for development of Curriculum, Teaching Materials, Resource Books and Logbooks.

NCS development and approval process involves Technical Panels and Employment Sector Councils and accreditation by the Maldives Qualifications Authority (MQA), thus aligning to the Maldives National Qualification Framework (MNQF).

It is with great pleasure we present the Waste to Wealth training package developed by MNSDA in collaboration with MEERY and Maldives Institute of Technology as a consultant.

Ahmed Nasheed

Chief Executive Officer

Maldives National Skills Development Authority

| | EMPLOYMENT SECTOR COUNCILS | | | |
|----|----------------------------|-------------------------------|--|--|
| # | Name | Designation | Organization | |
| 01 | Saudath Afeef | Director | Ministry of Youth, Sports and Community Empowerment | |
| 02 | Mariyam Azza Ali Rauf | Human Resource Manager | Waste Management Corporation Limited | |
| 03 | Fathmath Sauda | Allied Health Professional | Maldives Allied Health Council | |
| 04 | Mariyam Nuzla | General Manager | State Trade Organization | |
| 05 | Ali Shareef | Center for Foundation Studies | Villa College | |
| 06 | Aishath Shifana Wajeeh | - | Industry Expert | |
| 07 | Hamid Abdul Ghafoor | - | Industry Expert | |
| 08 | Ibrahim Nafiu | Secretary | Riverine Sports | |
| 09 | Aminath Asra | Director | Maldives National Skills Development Authority | |

National Occupational Standard has been endorsed by:

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Fathmath Sauda Chairperson

Social Employment Sector Council

Maldives National Skills Development Authority

Ministry of Higher Education

Kalaafaanu Hingun, H. Fulidhooge

Male', Maldives

Date of Endorsement: 26th October 2021

Date of Revision: -

| | TECHNICAL SUPPORT | | | |
|---------------------------------|-----------------------|------------------------|---|--|
| # Name Designation Organization | | Organization | | |
| 01 | Mariyam Nadha | Administrative Officer | Maldives National Skills Development Authority | |
| 02 | Aishath Hamna Abdulla | Administrative Officer | Maldives National Skills Development Authority | |

| | TECHNICAL PANEL MEMBERS | | | |
|----|-------------------------|--------------------|---|--|
| # | Name | Designation | Organization | |
| 01 | Aishath Rashfa | Assistant Director | Ministry of Environment, Climate Change and Technology | |
| 02 | Shaahina Ali | Country Director | Parley Maldives | |
| 03 | Abdulla Sinan | Assistant Manager | Waste Management Corporation Limited | |
| 04 | Inaya Abdul Raheem | Engineer | Environment Protection Agency | |
| 05 | Mohmaed Haikal | Lecturer | Maldives National University | |
| 06 | Mohamed Waheed | Assistant Lecturer | Maldives Polytechnic | |
| 07 | Ahmed Afrah Ismail | Co-Founder | Zero Waste Maldives | |

| VERSION | DEVELOPER | DATE | STANDARD CODE |
|---------|----------------------------------|-------------------------------|---------------|
| V1 | Maldives Institute of Technology | 26 th October 2021 | SOCS02V1/21 |

Standard Development Process

To begin with, Waste to Wealth occupations were profiled through study of occupation across Maldivian workplaces. Referred occupational profiling process led to the development of Draft Occupational Standard.

Draft occupational standard will be used to undertake functional analysis of Waste to Wealth occupation and referred functional process was undertaken with participation of industry experts. For strengthening development of National Occupational Standard, a panel with technical experts was formed from MNSDA. The members shall provide technical support and identify knowledge and skills to be included in the standard.

Once the standard is finalized among (TP) technical panel, this will be submitted to the designated Employment Sector Council. A brief report on how National Occupational Standard for Waste to Wealth shall be developed and presented to the council. Council members will ensure the industry need has been catered in the standard through inclusion of industry related knowledge and skills. Once the standard fulfills the recommendations of the Employment Sector Council, the standard will then be endorsed by the council.

After endorsing the standard from the relevant Employment Sector Council, final document shall be submitted to Maldives Qualification Authority (MQA) for approval. After the approval from MQA, National Occupational Standard for Waste to Wealth can be published, which would then be used by training providers.

Description of "Waste to Wealth Occupation"

Waste to Wealth play an important role in facilitating creation of wealth using the waste collected across the waste management centers established across the island. Besides wealth creation, referred occupation will also contribute to maintaining a clean and healthy environment across the Maldivian islands.

As of today, waste collected across the waste management centers remain as a burden to island administrators such as island and city councils. The program will develop a shift in the perspectives related to the collected waste through processing and recycling the waste for wealth creation.

Waste to wealth program shall prepare competent personnel to identify and process waste including development of value-added products using waste. This program shall develop skilled personnel capable and ready to use the garbage collected with creativity to maximise reuse and resale and consequently create wealth. The program will also continue to maintain a healthier and cleaner environment for all.

Job opportunities upon completion of "National Certificate III in Waste to Wealth"

Upon successful completion of the National certificate-3 in Waste to Wealth, students can work in the following jobs.

- 1. Waste Management Administrator
- 2. Waste Management Operator
- 3. Recycling Officer
- 4. Collecting Officer
- 5. Waste to Wealth Creator
- 6. Waste to Wealth Coordinator

KEY FOR CODING

Coding Competency Standards and Related Materials

| DESCRIPTION | REPRESENTED BY |
|--|--|
| Industry Sector as per ESC (Three letters) | Construction Sector (CON) Fisheries and Agriculture (FNA) Information, Communication and Technology (ICT) Transport Sector (TRN) Tourism Sector (TOU) Social Sector (SOC) Foundation (FOU) |
| Competency Standard | S |
| Occupation with in an industry sector | Two digits 01-99 |
| Unit | U |
| Common Competency | CR |
| Core Competency | CM |
| Optional / Elective Competency | OP |
| Assessment Resources Materials | A |
| Learning Resources Materials | L |
| Curricular | С |
| Qualification | Q1, Q2 etc. |
| MNQF level of qualification | L1, L2, L3, L4 etc. |
| Version Number | V1, V2 etc. |
| Year of Last Review of standard, qualification | By "/" followed by two digits responding to the year of last review, example /20 for the year 2020 |

1. Endorsement Application for Qualification 01

2. NATIONAL CERTIFICATE III IN WASTE TO WEALTH

3. Qualification code: SOCS02Q1L3V1/21 **Total Number of Credits: 68**

4. Purpose of the qualification

Purpose of this qualification is to create skilled personnel that understands waste generation on an island or resort context and is able to creatively find waste to wealth solutions to different waste streams generated in their place of work. It is believed that there will be a huge demand for trained waste to wealth operators from Councils and also Resorts.

5. Regulations for the qualification

National Certificate III in Waste to Wealth will be awarded to those who are competent in units 1+2+3+4+5+6+7+8+9+10+11+12+13+14+15+16

6. Schedule of Units

| Unit No | Unit Title | Code | |
|---------------------|---|-----------------|--|
| Common Competencies | | | |
| 01 | Follow work health and safety procedures | SOCCM01V1/21 | |
| 02 | Apply work ethics and professionalism | SOCCM02V1/21 | |
| 03 | Practice effective workplace communication | SOCCM03V1/21 | |
| 04 | Perform basic computer operations | SOCCM04V1/21 | |
| 05 | Provide first aid | SOCCM05V1/21 | |
| 06 | Respond to fire | SOCCM06V1/21 | |
| Core Co | mpetencies | | |
| 07 | Apply Sustainable Waste Management Practices | SOCS02CR07V1/21 | |
| 08 | Identify and respond to hazards and emergencies in waste management | SOCS02CR08V1/21 | |
| 09 | Apply workshop practice | SOCS02CR09V1/21 | |
| 10 | Apply waste reduction using waste segregation and auditing | SOCS02CR10V1/21 | |
| 11 | Identify and Prepare items for reuse and resale | SOCS02CR11V1/21 | |
| 12 | Operate & maintain machinery and equipment | SOCS02CR12V1/21 | |
| 13 | Prepare value added products using organic waste | SOCS02CR13V1/21 | |
| 14 | Prepare value added products using recyclable waste | SOCS02CR14V1/21 | |
| 15 | Maintain waste management site | SOCS02CR15V1/21 | |
| 16 | Apply entrepreneurship skills | SOCS02CR16V1/21 | |

| 7.Accreditation requirements | The training provider should place trainees in relevant industry or sector to provide the trainees the hands-on experience exposure related to this qualification. |
|------------------------------------|--|
| 8. Recommended sequencing of units | As appearing under the section 06 |

Unit Details

| # | Unit Title | Code | Level | No of Credit |
|----|---|-----------------|-------|-----------------|
| 01 | Follow work health and safety procedures | SOCCM01V1/21 | III | 04 |
| 02 | Apply work ethics and professionalism | SOCCM02V1/21 | III | 03 |
| 03 | Practice effective workplace communication | SOCCM03V1/21 | III | 04 |
| 04 | Perform basic computer operations | SOCCM04V1/21 | III | 03 |
| 05 | Provide first aid | SOCCM05V1/21 | III | 04 |
| 06 | Respond to fire | SOCCM06V1/21 | III | 03 |
| 07 | Apply Sustainable Waste Management Practices | SOCS02CR07V1/21 | III | 05 |
| 08 | Identify and respond to hazards and emergencies in waste management | SOCS02CR08V1/21 | III | 05 |
| 09 | Apply workshop practice | SOCS02CR09V1/21 | III | 05 |
| 10 | Apply waste reduction using waste segregation and auditing | SOCS02CR10V1/21 | III | 05 |
| 11 | Identify and Prepare items for reuse and resale | SOCS02CR11V1/21 | III | 04 |
| 12 | Operate & maintain machinery and equipment | SOCS02CR12V1/21 | III | 05 |
| 13 | Prepare value added products using organic waste | SOCS02CR13V1/21 | III | 06 |
| 14 | Prepare value added products using recyclable waste | SOCS02CR14V1/21 | III | 06 |
| 15 | Maintain waste management site | SOCS02CR15V1/21 | III | 03 |
| 16 | Apply entrepreneurship skills | SOCS02CR16V1/21 | III | 03 |

Packaging of National Qualifications:

National Certificate III in Waste to Wealth will be awarded to those who are competent in units 1+2+3+4+5+6+7+8+9+10+11+12+13+14+15+16

Qualification Code: SOCS02Q1L3V1/21

COMPETENCY BASED ASSESSMENT

The final assessment of the National Competency-Based Programmes conducted by the Maldives National Skills Development Authority (MNSDA) is a competency-based assessment.

The Competency-Based Assessment ensures that the students' performance meets the requirements specified in the National Competency Standards (NCS). This assessment approach is designed to verify that graduates are job-ready and meet established occupational competency requirements within their respective fields.

Eligibility for Final Assessment

To be eligible for the final Competency-Based Assessment, students must fulfil the following conditions:

- achieve a **minimum of 80%** attendance
- deemed competent in each of the units of the programme in the pre-assessment

Competency-Based Assessment Process

Upon submission of the Pre-assessment report by the training provider, MNSDA will check for all the necessary supporting documents and conduct Competency-Based Assessment through a National Assessor registered with MNSDA. It is important to note that any trainer involved in the training process is **not permitted** to conduct the assessment to maintain impartiality and integrity of the process.

The final Competency-Based Assessment conducted by MNSDA includes both:

- **Theory**: Evaluating students' knowledge and understanding of key theoretical aspects of the competency.
- **Practical:** Assessing hands-on skills and application of knowledge in real-world or simulated environments.

Once the assessment is completed, the National Assessor will send the Competency-Based Assessment Report to MNSDA.

Competency Status Requirement

For certification to be granted, the student must be officially declared "Competent" in each of the units of the programme by the National Assessor.

Conclusion

Competency-Based Assessment is a critical component in ensuring the quality and credibility of technical and vocational skills-based training. By adhering to the outlined procedure, MNSDA upholds the standards required to certify students who are fully prepared to meet industry demands.