Competency Certification for Agricultural Workers in Southeast Asia

FINAL REPORT
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Bernie S. Justimbaste and Edwin P. Bacani

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1 Formerly titled "Towards the Development of Competency Standards of Agricultural Workers in the ASEAN Region"
2 Principal Investigator of the SEAMEO SEARCA project Towards the Development of Competency Standards for Agricultural Workers in the ASEAN Region
3 Technical Assistant of the SEAMEO SEARCA project Towards the Development of Competency Standards for Agricultural Workers in the ASEAN Region
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PART I

Executive Summary and Synthesis
Executive Summary and Synthesis

The Southeast Asian Ministers of Education Organization (SEAMEO) promotes technical and vocational education and training (TVET) as one of its seven education priorities, and convenes regular meetings of high officials responsible for TVET in Southeast Asia (HOM on SEA-TVET). Likewise, the SEAMEO has a network of 24 specialist institutions, one of which is the SEAMEO Regional Center for Graduate Study and Research in Agriculture (SEAMEO SEARCA) whose primary mandate is to promote agricultural and rural development in the region.

In the 2nd HOM on SEA-TVET held in Bali, Indonesia on May 12-14, 2016, regional and national qualification reference frameworks and assurance framework have been recognized as essential and necessary in the harmonization and internationalization of TVET in Southeast Asia. These would require mapping competency standards and certification schemes for workers in priority sectors which initially included agriculture and fisheries, hospitality and tourism, mechatronics and construction. For agriculture which ironically compared to other sectors has not been given enough attention and priority in TVET, SEAMEO SEARCA had been enjoined to assist in mapping competency standards development and certification efforts. Subsequently, in the 3rd HOM on SEA-TVET held in Kuala Lumpur, Malaysia on 23–25 May 2017, an agreement was reached for SEAMEO SEARCA to proceed with its self-funded project.

The project was originally referred to as “Towards the Development of Competency Standards of Agricultural Workers in the ASEAN Region” but later changed to “Competency Certification for Agricultural Workers in Southeast Asia” to more aptly reflect the geographical coverage of SEAMEO and the “systems approach” it adopted in considering emerging trends and realities in the region. Competency standards must be viewed in relation to training, quality assurance, assessment, and competency certification to meet ASEAN standards. The results of the project are highlighted below.

Agriculture remains the backbone of most Southeast Asian economies which are among the world’s biggest exporters of key agricultural products such as rice. Its importance in food and nutrition security as well as in poverty alleviation is also well recognized throughout the region. However, it now faces enormous challenges. The ASEAN initiatives transforming the region into a “single market and production base” bring about structural shifts in region’s economies as evidenced by recent data on their agriculture sectors’ declining share in GDP and in total employment.

Moreover, data show that intra-ASEAN labor mobility is on the rise but its composition remains largely low skilled, and predominantly through the following corridors – Thailand attracting 1.9 million workers from Myanmar, 926 thousand workers from Lao PDR and 750 thousand workers from Cambodia; Malaysia hosting 1.05 million workers from Indonesia and 248 thousand workers from Myanmar; and Singapore, 1.04 million workers from Malaysia. It would not be unfair to infer that many of these migrant workers come from the agriculture sector, specifically agricultural waged workers who do not own farmlands and have higher propensity to migrate in search of better paying jobs rather than the family-based small farm holders.
In this regard, the Asian Development Bank (ADB) - International Labor Organization (ILO) 2014 Study recommends that skill recognition under multilateral frameworks would be a more sustainable and legitimate mode of managing labor mobility in the ASEAN region as it offers benefits for both sending and receiving countries.

In fact, the ASEAN Economic Cooperation Blueprint adopted in 2007 calling for “free flow of skilled labor through harmonization and standardization” has become the basis for the adoption in 2014 of the ASEAN Qualifications Reference Framework (AQRF) covering all education and training sectors, including TVET, whether formal, non-formal and informal learning. The AQRF is designed to support and enhance each ASEAN Member State’s (AMS) national qualifications framework by enabling comparisons of qualifications across AMS in terms of recognition, promotion of life-long learning, facilitation of learner and worker mobility, transparency, and quality assurance.

Giving importance to recognition of non-formal and informal learning, the AQRF initiatives would certainly benefit agricultural workers, both waged workers and small farm holders, as they acquire skills and knowledge largely through non-formal and informal learning modes being provided predominantly by agriculture extension services systems in the region. These are also expected to broaden the access of agricultural workers to flexible pathways to opportunities such as further learning, reskilling, and employment for agricultural waged workers as well as upskilling for productivity improvement of small farm holders.

While the AQRF is expected to support and enhance the individual national qualifications framework (NQF) or qualifications system of AMS, the fact remains that these are in varying stages of development and implementation. Some are fully developed and functioning NQFs while others have barely started. As a form of assistance, the International Labor Organization (ILO) developed and published in 2016 the Regional Model Competency Standards (RMCS) for a few sectors including agriculture and aquaculture.

Across AMS, TVET qualifications have prevalently been accorded through competency certification systems. In 2016, the ASEAN Guiding Principles for Quality Assurance and Recognition of Competency Certification Systems have been adopted by the 24th ASEAN Labor Ministers Meeting (ALMM). While many competency certification systems came ahead of the establishment of NQFs, the AMS are committed to link and integrate them into their NQFs. Said document pointed out that “assessment only” services under the competency certification systems are technically the same as recognition of prior learning.

The results of the project were presented and validated in a regional workshop convened on 9–10 May 2018 in SEARCA Headquarters, Los Baños, Laguna, Philippines and jointly hosted by SEAMEO SEARCA and the Philippine Technical Education and Skills Development Authority (TESDA). It was participated in by representatives from all members of HOM on SEA-TVET. The regional workshop drew out a four-point recommendation that was subsequently presented and elevated for consideration in the 4th HOM on SEA-TVET held on 4-5 September 2018 in Manila, Philippines.
The four-point recommendation focused on the following:

1. Encourage TVET institutions to increasingly assume proactive and transforming roles in assessing, validating and certifying skills and experience gained through non-formal and informal modes within a lifelong learning framework;
2. Strengthen and expand competency certification systems to cover recognition of non-formal and informal learning;
3. Encourage TVET institutions to pursue partnerships and alliances with a broader range of stakeholders; and
4. Promote support from regional TVET networks and international cooperation.

The 4th HOM on SEA-TVET agreed for further implementation the SEAMEO SEARCA report titled “Competency Certification for Agricultural Workers in Southeast Asia”. In response to the recommendations, it adopted the following courses of action: one, the development of Term of Reference (TOR) for Recognition of Prior Learning including guidelines on assessment and implementation; two, member countries are called to share their existing national terms of reference and guidelines on recognition of prior learning; and three, following the SEAMEO SEARCA successful project experience, the SEAMEO Secretariat would increasingly involve other specialist institutions in its network as Sub-theme Coordinating Agencies in other study areas concerning HOM on SEA-TVET.

In conclusion, SEAMEO SEARCA through the years is keen not only in sharing its knowledge and experience on agriculture and rural development but more importantly in nurturing partnership and collaboration with as many stakeholders which now include TVET institutions.
PART II

Background Paper on
“Competency Certification for
Agricultural Workers in Southeast Asia”
Competency Certification for Agricultural Workers in Southeast Asia

Bernie S. Justimbaste and Edwin P. Bacani

I. Background

During the Third Meeting of High Officials representing the member countries of the Southeast Asian Technical and Vocational Education and Training (SEA – TVET) held in Kuala Lumpur, Malaysia on 23–25 May 2017, an agreement was reached for the Southeast Asian Regional Center for Graduate Study and Research in Agriculture (SEARCA) to conduct a study on competency standards for agricultural workers in Southeast Asia. This was a step forward from previous agreement to map national competency standards among the Southeast Asian countries in order to promote harmonization initially with four priority industry areas – agriculture and fisheries, hospitality and tourism, mechatronics and construction.

This paper aims to provide background information on the state of competency certification for agricultural workers in selected countries in the region. Largely drawn from secondary data available in public domain, it offers a food for thought in the discussions and debates during the 9–10 May 2018 workshop to be held in SEARCA Headquarters, Los Baños, Laguna, Philippines to consider and draw out possible recommendations that can be elevated to the Fourth SEA-TVET HOM to be hosted by the Philippine Technical Education and Skills Development Authority (TESDA) and to be held in the Philippines in September 2018.

II. Challenges Faced by the Agriculture Sector

The agriculture sector in Southeast region faces enormous challenges. The ongoing ASEAN Economic Community (AEC) initiatives, aimed at transforming the region into a “single market and production base”, would bring about structural shifts in the economies of ASEAN Member States (AMS). Foremost among these structural shifts are the declining share of agriculture in GDP and in total employment. Tables 1 and 2 reveal that said shifts are already in motion.

<table>
<thead>
<tr>
<th>AMS</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brunei Darussalam</td>
<td>0.7</td>
<td>0.8</td>
<td>0.8</td>
<td>0.8</td>
</tr>
<tr>
<td>Cambodia</td>
<td>26.0</td>
<td>24.9</td>
<td>23.6</td>
<td>21.7</td>
</tr>
<tr>
<td>Indonesia</td>
<td>13.3</td>
<td>13.2</td>
<td>13.0</td>
<td>12.8</td>
</tr>
<tr>
<td>Lao PDR</td>
<td>19.5</td>
<td>18.9</td>
<td>18.3</td>
<td>16.5</td>
</tr>
<tr>
<td>Malaysia</td>
<td>9.7</td>
<td>9.3</td>
<td>9.0</td>
<td>8.1</td>
</tr>
<tr>
<td>Myanmar</td>
<td>31.4</td>
<td>29.9</td>
<td>28.9</td>
<td>27.5</td>
</tr>
</tbody>
</table>

1 Background Paper delivered during the Regional Workshop on Competency Certification for Agricultural Workers in Southeast Asia held on 9-10 May 2018 at SEARCA Headquarters, Los Baños, Laguna, Philippines.
2 Principal Investigator of the SEARCA project Towards Development of Competency Standards for Agricultural Workers in Southeast Asia
3 Technical Assistant of the SEARCA project Towards Development of Competency Standards for Agricultural Workers in Southeast Asia
<table>
<thead>
<tr>
<th>Country</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Philippines</td>
<td>10.5</td>
<td>10.0</td>
<td>9.5</td>
<td>8.8</td>
</tr>
<tr>
<td>Singapore</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Thailand</td>
<td>7.2</td>
<td>7.2</td>
<td>6.7</td>
<td>6.3</td>
</tr>
<tr>
<td>Vietnam</td>
<td>19.4</td>
<td>18.9</td>
<td>18.2</td>
<td>17.3</td>
</tr>
</tbody>
</table>

Source: Culled from Table 4.6, ASEAN Statistical Year Book 2016/2017
Table 2. Share of Agricultural Workers to Total Employment Among AMS, Selected Years

<table>
<thead>
<tr>
<th>AMS</th>
<th>Year</th>
<th>Number ('000)</th>
<th>% to Total Employment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brunei Darussalam</td>
<td>1995</td>
<td>2</td>
<td>2.6</td>
</tr>
<tr>
<td></td>
<td>2014</td>
<td>1</td>
<td>0.5</td>
</tr>
<tr>
<td>Cambodia</td>
<td>2003</td>
<td>4,500</td>
<td>64.8</td>
</tr>
<tr>
<td></td>
<td>2004</td>
<td>4,520</td>
<td>60.3</td>
</tr>
<tr>
<td></td>
<td>2014</td>
<td>3,930</td>
<td>54.9</td>
</tr>
<tr>
<td>Indonesia</td>
<td>2014</td>
<td>38,973</td>
<td>34.0</td>
</tr>
<tr>
<td></td>
<td>2015</td>
<td>37,748</td>
<td>32.9</td>
</tr>
<tr>
<td></td>
<td>2016</td>
<td>37,770</td>
<td>31.9</td>
</tr>
<tr>
<td>Lao PDR</td>
<td>2010</td>
<td>2,155</td>
<td>71.3</td>
</tr>
<tr>
<td></td>
<td>2015</td>
<td>2,501</td>
<td>71.7</td>
</tr>
<tr>
<td>Malaysia</td>
<td>2014</td>
<td>1,694</td>
<td>12.5</td>
</tr>
<tr>
<td></td>
<td>2015</td>
<td>1,754</td>
<td>12.5</td>
</tr>
<tr>
<td></td>
<td>2016</td>
<td>1,610</td>
<td>11.4</td>
</tr>
<tr>
<td>Myanmar</td>
<td>2014</td>
<td>11,736</td>
<td>52.4</td>
</tr>
<tr>
<td></td>
<td>2015</td>
<td>11,266</td>
<td>51.7</td>
</tr>
<tr>
<td>Philippines</td>
<td>2014</td>
<td>11,962</td>
<td>30.8</td>
</tr>
<tr>
<td></td>
<td>2015</td>
<td>11,773</td>
<td>29.6</td>
</tr>
<tr>
<td></td>
<td>2016</td>
<td>11,801</td>
<td>28.3</td>
</tr>
<tr>
<td>Singapore</td>
<td>2014</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>2015</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>2016</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Thailand</td>
<td>2014</td>
<td>12,733</td>
<td>32.4</td>
</tr>
<tr>
<td></td>
<td>2015</td>
<td>12,272</td>
<td>31.3</td>
</tr>
<tr>
<td></td>
<td>2016</td>
<td>11,747</td>
<td>30.2</td>
</tr>
<tr>
<td>Vietnam</td>
<td>2014</td>
<td>24,440</td>
<td>47.9</td>
</tr>
<tr>
<td></td>
<td>2015</td>
<td>23,259</td>
<td>44.0</td>
</tr>
<tr>
<td></td>
<td>2016</td>
<td>22,315</td>
<td>41.9</td>
</tr>
</tbody>
</table>

Source: Culled from Table 3.9, ASEAN Statistical Year Book 2016/2017

In 2013 – 2016 period, all AMS, except Brunei Darussalam and Singapore, have reported waning contribution of agriculture sector to their total GDP with the biggest decline in Cambodia and Myanmar. It should be noted however that agriculture collectively generates about 10 % of total ASEAN GDP.

On the other hand, Table 2 shows that agricultural employment is waning in terms of both numbers and percentages to total employed workers in most AMS except Lao PDR where agriculture sector employs 71.7 % of total employed. Likewise, agriculture remains the predominant employer in Cambodia, Myanmar and Vietnam.

It is well accepted that competitiveness, productivity and economic growth largely depend on the ability to acquire and use knowledge as well as to attract the best talents. In pursuing a “single market and production base”, the AEC Blueprint (2008) has called for a “free flow of skilled workers”. Table 3 indicates that in 2013, about 88 % of the total intra-ASEAN migrant stock is accounted for by top five corridors alone. These include: 1) Myanmar to Thailand, 2) Indonesia to Malaysia, 3) Malaysia to Singapore, 4) Lao PDR to Thailand, and 5) Cambodia to Thailand.
Table 3. Top 25 Intra-ASEAN Migration Corridors, 2013

<table>
<thead>
<tr>
<th>Rank</th>
<th>Country Corridor</th>
<th>Intra-ASEAN Migrant Stock</th>
<th>Proportion of Total Intra-ASEAN Migrants (in %)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Myanmar to Thailand</td>
<td>1,892,480</td>
<td>29</td>
</tr>
<tr>
<td>2</td>
<td>Indonesia to Malaysia</td>
<td>1,051,227</td>
<td>16</td>
</tr>
<tr>
<td>3</td>
<td>Malaysia to Singapore</td>
<td>1,044,994</td>
<td>16</td>
</tr>
<tr>
<td>4</td>
<td>Lao PDR to Thailand</td>
<td>926,427</td>
<td>14</td>
</tr>
<tr>
<td>5</td>
<td>Cambodia to Thailand</td>
<td>750,109</td>
<td>12</td>
</tr>
<tr>
<td>6</td>
<td>Myanmar to Malaysia</td>
<td>247,768</td>
<td>4</td>
</tr>
<tr>
<td>7</td>
<td>Indonesia to Singapore</td>
<td>152,681</td>
<td>2</td>
</tr>
<tr>
<td>8</td>
<td>Singapore to Malaysia</td>
<td>78,092</td>
<td>1</td>
</tr>
<tr>
<td>9</td>
<td>Vietnam to Cambodia</td>
<td>37,225</td>
<td>1</td>
</tr>
<tr>
<td>10</td>
<td>Thailand to Cambodia</td>
<td>31,472</td>
<td>-</td>
</tr>
<tr>
<td>11</td>
<td>Thailand to Brunei</td>
<td>25,451</td>
<td>-</td>
</tr>
<tr>
<td>12</td>
<td>Philippines to Malaysia</td>
<td>21,345</td>
<td>-</td>
</tr>
<tr>
<td>13</td>
<td>Thailand to Indonesia</td>
<td>19,681</td>
<td>-</td>
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<tr>
<td>14</td>
<td>Singapore to Indonesia</td>
<td>19,681</td>
<td>-</td>
</tr>
<tr>
<td>15</td>
<td>Thailand to Singapore</td>
<td>17,644</td>
<td>-</td>
</tr>
<tr>
<td>16</td>
<td>Philippines to Singapore</td>
<td>14,176</td>
<td>-</td>
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<tr>
<td>17</td>
<td>Cambodia to Malaysia</td>
<td>13,876</td>
<td>-</td>
</tr>
<tr>
<td>18</td>
<td>Vietnam to Lao PDR</td>
<td>11,447</td>
<td>-</td>
</tr>
<tr>
<td>19</td>
<td>Myanmar to Vietnam</td>
<td>9,783</td>
<td>-</td>
</tr>
<tr>
<td>20</td>
<td>Thailand to Malaysia</td>
<td>8,137</td>
<td>-</td>
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<td>21</td>
<td>Indonesia to Vietnam</td>
<td>7,671</td>
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<td>22</td>
<td>Brunei to Malaysia</td>
<td>5,975</td>
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<td>23</td>
<td>Vietnam to Thailand</td>
<td>5,966</td>
<td>-</td>
</tr>
<tr>
<td>24</td>
<td>Lao PDR to Vietnam</td>
<td>4,284</td>
<td>-</td>
</tr>
<tr>
<td>25</td>
<td>Philippines to Indonesia</td>
<td>3,517</td>
<td>-</td>
</tr>
</tbody>
</table>

Source: Lifted from G. Sugiyarto and D.R. Agunias, ‘Freer’ Flow of Skilled Labour within ASEAN: Aspirations, Opportunities and Challenges in 2015 and Beyond, IOM-MPI Issue in Brief No. 11

A number of studies (Orbeta, 2013; Sugiyarto, 2014 and ADB-ILO, 2014) have pointed out that a significant portion (estimated at 87%) of intra-ASEAN migration is composed of low-skilled workers including agricultural workers. The International Labor Migration Statistics (ILMS) Database in ASEAN has published data on migrant agricultural workers among AMS and these are shown in Table 4. While the data might be based on the number of registered migrant agricultural workers, they somehow confirm the migration corridors. For example, the migration of Indonesian agricultural workers in Malaysia’s plantations. As cited by Yugiyarto (2014), there is a dearth of data on irregular migration. In 2005, Malaysia through an amnesty program had documented the largest number of irregular migrants at 400,000 out of the estimated 800,000 to 1,200,000 migrant workers. Of these, 87% came from Indonesia and predominantly male. (Agunias et al, 2011 as cited by Yugiyarto, 2014). Thailand regularized 500,000 immigrants in 2001 and more than 1 million in 2009. (OECD, 2012 as cited by Yugiyarto, 2014)

In this regard, the Asian Development Bank (ADB) - International Labour Organization (ILO) 2014 Study recommends that skill recognition under multilateral frameworks could better provide channels for migrant workers and promote a more sustainable and legitimate mode of managing labor mobility. It offers benefits for both sending and receiving AMS.
The propensity of agricultural workers to migrate may be better understood if they are categorized into small holders and waged agricultural workers. The FAO defines smallholders as “small-scale farmers, pastoralists, forest keepers, fishers who manage areas varying from less than one hectare to 10 hectares. Smallholders are characterized by family-focused motives such as favoring the stability of the farm household system, using mainly family labor for production and using part of the produce for family consumption”4.

On the other hand, waged agricultural workers are “women and men who labor in the crop fields, orchards, glasshouses, livestock units, and primary processing facilities to produce the world’s food and fibres; and are employed on small- and medium-sized farms as well as large industrialized farms and plantations. They are waged workers because they do not own or rent the land on which they work nor the tools and equipment they use and so are a group distinct from farmers.” (p. 23, Hurst, 2005).

Waged agricultural workers have higher propensity to seek higher paying job opportunities than smallholders.

Amidst the daunting changes in the economic landscape, the agriculture sector continues to play a significant role in the ASEAN region. This position was aptly explained by Mr. Le Luong Minh, the ASEAN Secretary General during the April 19, 2015 launching of the Grow Asia5, a partnership platform between the World Economic Forum and the ASEAN. Noting that ASEAN economies are among the world’s biggest exporters of key agricultural products such as rice, he said that “in every ASEAN country, agriculture is an engine of growth and important for food security. ASEAN has a food security framework and plan of action. Cooperation in food production and agriculture is focused on improving the livelihood of farmers. Food security and the promotion of the agriculture sector should be achieved through public-private partnerships with the support and collaboration of all stakeholders.”

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A positive outlook on agriculture is urgently needed to be advocated. One appeared in a blog in the Grow Asia website\(^6\). It reads:

*It is easy to take a pessimistic and common approach by thinking that one day nobody will be left to farm, as today’s farmers will have retired or passed away and all the young people will have left farming for well-paid city jobs. Personally, I do not take this view…*

Looking back 150-200 years ago, almost all developed countries had large numbers of farmers who comprised around 40% of total jobs. Now, around 2% of jobs in developed countries are on farms. This means that for every one farmer today, there used to be 20. However, this one farmer is a highly skilled professional, farming a larger tract of land. This process did not happen overnight but over many decades and through education and training.

We should also remain cognizant that today many new jobs are appearing in the food value chain, from input supply (such as seeds, fertilizer and chemicals) to the added value enterprises that take farm production to the consumer – in logistics, storage, marketing, processing and food preparation.

The lesson is that you don’t need large numbers of farmers to feed the world. Fewer, larger and better family farmers will make a difference and lift people out of poverty. But these farmers need to be supported to become professional farmers, and they need skills and expertise to farm larger pieces of land and deliver high productivity levels. In other areas of the world, the creation of a land market has achieved this, particularly in terms of land leasing and tenancy.

Although some farmers will remain focused on subsistence, and others will choose to seek jobs outside of agriculture, research shows there is a cadre of younger people who want to become better farmers than their parents. We haven’t yet understood all of what they need. But early studies are showing that young people are typically interested in higher value sectors such as animal proteins, high value crops and value additions. They are also far more open than their parents to new technologies – whether it is hybrid cows or being willing to pay for digital information.

The ASEAN economic integration will certainly affect the lives of many agricultural workers in a profound manner. Many waged agricultural workers will opt to seek job opportunities outside agriculture and smallholders are expected to be “farmers by choice”. In both cases, they need be supported to secure employment, compete for more rewarding job transition opportunities and build stable and fulfilling careers. To support them, a practical approach is recommended in the Insight Report: Towards a Reskilling Revolution A Future of Jobs for All (January 2018)\(^7\) published by the World Economic Forum (WEF), i.e. promote lifelong learning and continuous re-skilling. Private institutions and NGOs can play critical role in this endeavor. Lifelong learning and reskilling opportunities can be driven and scaled up by a policy and strategy of wide-spread adoption of “micro-credentials” and new methods of education and training delivery. Skills recognition or competency certification can be considered, technically speaking, as among “micro credentials” or “micro-qualifications”.

\(^7\) [https://www.weforum.org/reports/towards-a-reskilling-revolution](https://www.weforum.org/reports/towards-a-reskilling-revolution)
III. Learning and Skills Development in Agriculture

In most, if not all, of AMS, agricultural workers acquire skills and knowledge largely through non-formal and informal learning modes that are often not recognized as qualifications. To improve the skills base of agriculture, governments have normally pursued a policy of providing agricultural extension services. As a result, formal training and qualifications have less been emphasized.

The UNESCO-IFAD Study (Learning Knowledge and Skills for Agriculture to Improve Rural Livelihoods) offers useful insights on how young people in rural areas perceive their learning and lives. It covered three country case studies, one of which is Cambodia that included two villages in Kampot and Siem Reap. The Cambodia case reveals the following:

- Perceptions of young people about learning agricultural skills and knowledge differ depending on age and marital status. Young married individuals are more interested in agriculture skills as they own land after marriage and have to bear more responsibilities and commitment. Comparatively, younger age groups want to work in places they can socialize with their peers. The youngest group see farming as too harsh and difficult and have no ideas of alternative job opportunities in agriculture other than tilling the land.
- Skills learning is predominantly done through learning by observation. Young people learn from parents and family members through watching, observing and doing (not asking directly), and corrected when they err. People copied new techniques from neighbors who undertook training but rarely interact with them directly.
- Formal education is mainly seen as attracting young people to get out of agriculture rather than building their interest and competencies, particularly among young women. Success in formal school is viewed as a way out of agriculture (as young people have myopic view of job possibilities in agriculture).
- Different kinds of learning are associated with different kinds of service providers: private, NGOs, government and media. Clients are eager to participate in training programs offered and efficiently run by private sector providers as profits and risks are shared. Private sector provision was characterized by more on-the-job, one-on-one intensive customized training, and was developed on a larger scale. NGOs targeted the poorer groups, providing more subsidy or incentives, and soft skills training (such as marketing).

The study also noted that respondents did not offer comments on government’s programs. Also, many respondents perceive that agricultural programs on television have not been interesting. They use mobile phones mainly for socialization. In addition, ICT used in adult learning program is often taught in “schooled” or formal way without much learning by doing.

It concluded that much have to be explored in bringing together the strengths of private sector in providing high-quality and profitable knowledge and skills development programs (for instance, in contract farming) with the NGOs’ and government’s commitment to help the poorest in the community. It recommended that policies and programs have to be specifically tailored fit to different perceptions and aspirations of young people based on their age, gender, economic conditions and marital status rather than continuing the traditional “one-size-fits-all” approach if the prevailing misperception that agriculture work is a job of last resort is to be corrected.
It also offered information to guide future policy direction as follows:

1. Increasingly use the media to correct the misperception of young people on agriculture and help them access knowledge and skills development opportunities. Public and private institutions have to work together in making agricultural television and radio programs more attractive, relevant, instructive, and linked to profitable opportunities. Media programs should highlight different job and income-generating opportunities in agriculture sector to entice young people to consider it as a viable option for their future.

2. Programs should focus on married young people who have shown more serious interest in gaining new agricultural knowledge and skills.

3. Create linkages between agriculture and other sectors in which farmers are trained in various knowledge and skills, including soft skills (particularly marketing).

The UNESCO-IFAD Study provides evidences on the importance of informal learning and intergenerational transfer of agricultural skills and knowledge that need to be increasingly considered not only in curriculum and teaching/learning approaches but also in assessment and accreditation mechanisms particularly as they have potentials in complementing formal education and training programs and in the adoption of new knowledge and technologies.

The agricultural (and rural) extension services have traditionally been pursued as a way to improve the skills base of agriculture. An assessment of agricultural extension services worldwide had been jointly undertaken by FAO and IFPRI in 2001. The Worldwide Extension Study provides empirical data on the human and financial resources of agricultural extension and advisory systems worldwide.

For Southeast Asia, the data are summarized in Table 5. In 2009-2012 period, Indonesia reported the highest number of extension workers with 53,944 staff, followed by Vietnam (34,747), the Philippines (32,328), and Thailand (18,881). The other AMS have reported significantly less number of extension staff such as Myanmar (10,947), Malaysia (1,355), Cambodia (1,244) and Lao PDR (962). In the case of Singapore, three agriculture-related agencies offer extension services, although records on staff complement were not available.

<table>
<thead>
<tr>
<th>AMS</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brunei Darussalam</td>
<td>n.a.</td>
</tr>
<tr>
<td>Cambodia</td>
<td>1,302</td>
</tr>
<tr>
<td>Indonesia</td>
<td>53,944</td>
</tr>
<tr>
<td>Laos</td>
<td>962</td>
</tr>
<tr>
<td>Malaysia</td>
<td>1,355</td>
</tr>
<tr>
<td>Myanmar</td>
<td>4,554</td>
</tr>
<tr>
<td>Philippines</td>
<td>25,000</td>
</tr>
<tr>
<td>Singapore</td>
<td>n.a</td>
</tr>
<tr>
<td>Thailand</td>
<td>16,986</td>
</tr>
<tr>
<td>Vietnam</td>
<td>34,747</td>
</tr>
</tbody>
</table>

The assessment study reported that most countries in the region did not have agricultural extension (rural advisory) policies or strategies and did not have systems in place for monitoring progress and evaluating the impact of public extension services. In many countries, reforms have been initiated to
make their extension services more client-oriented, and to move away from purely technical advice aimed at increasing agricultural production towards the inclusion of other socio-economic factors at the farm and market levels as well as environmental concerns. The extent to which these reforms have resulted in pluralistic, accountable, and demand-driven systems is yet to be assessed.

In Southeast Asian region, the countries are equally divided between those that have public sector-dominated agricultural extension systems such as Brunei Darussalam, Malaysia, Myanmar, Singapore and the Philippines; and those that have more pluralistic agricultural extension systems such as Cambodia, Indonesia, Lao PDR, Thailand and Vietnam.

There are recent evidences on developments toward more pluralistic extension systems. The Philippines is increasingly involving NGOs and private companies in extension activities while Singapore cooperates with business companies to transfer technology and provide information to farmers.

AMS that have adopted more pluralistic agricultural extension approaches are located in the mainland Asia (except for Myanmar) and they have pioneered the ICT-enabled extension systems through telecenters as in the cases of Cambodia, Lao PDR, and Vietnam. In a number of pluralistic extension arrangements, the linkages between public sector extension and agricultural universities and private sector supply firms and exporters as well as consumer organizations appear to be weak as in the case of Indonesia. However, data indicate that close and effective linkages exist in Myanmar between research and extension. In public sector-dominated extension systems like in Malaysia, extension officers tend to need to upgrade their competencies.

Throughout Southeast Asia, in general, farmers’ organizations have played prominent roles. Indonesia, for example, have some 25 percent of farmers belonging to farmer or producer organizations estimated to number about 318,000. Likewise, donor organizations and NGOs along with private sector entities have continued to play significant roles in promoting and advancing extension services in the region.

Among the common weaknesses in the study are: lack of connection between teaching, research, and extension institutions and agencies; lack of cooperation between the government, NGOs, the private sector, and farmers; and lack of integrated approaches along the whole value chain.

Specific issues included institutional development, system management and agent competencies. In Malaysia, for example, communication skills of extension staff need to be enhanced along with job performance, attitude, skills, and knowledge. A continuing emphasis on the theory prevails rather than on practice.

However, it recognized some good models of extension and support services offered by the private sector, farmers’ cooperatives, and NGOs with the potential to be further developed into innovative public-private and NGO-market partnerships, integrating research and advisory services along the value chain.

Regional cooperation on agricultural extension exists. A good example is the cooperation among Brunei Darussalam, the Philippines, and Singapore as well as with the People’s Republic of China in East Asia. Likewise, a large number of international NGOs and private companies have been contributing to the region’s agricultural extension efforts, notably in Lao PDR, sharing the latest scientific knowledge and technology on agricultural production and agribusiness supply.
In 2015, the Grow Asia has been founded by the World Economic Forum in collaboration with the ASEAN Secretariat. Endorsed by all 10 Ministers of Agriculture and Forestry in ASEAN, it currently supports Cambodia, Indonesia, Myanmar, Philippines and Vietnam that have established national partnership platforms designed to facilitate multi-stakeholder collaboration for enabling sustainable and inclusive agricultural development in Southeast Asia. Grow Asia focuses on the development of smallholder farmers and food security, the environmental sustainability of agriculture by supporting scalable, market-based solutions across agricultural value chains. By 2020, the partnership aims to reach 10 million smallholder farmers, improving farm productivity, profitability and environmental sustainability by 20%. Currently, it has reported to have collectively reached nearly 500,000 smallholder farmers through 26 value chain initiatives. Grow Asia’s initiatives center on building farming models that enable the transfer of knowledge, working with farmers’ networks and learning centers, and on identifying farmers’ groups comprising farmers who can lead/train others.

These point to the fact that the private sector can play a crucial role in spreading lifelong and reskilling opportunities among agricultural workers while innovating on methods of education and training delivery that fit the prevailing non-formal and informal learning and skills development in the agricultural and rural areas. The driving strategy to scale up these opportunities is to put in place a competency certification (micro- credentials) system.

IV. Skills Recognition Initiatives

A skills recognition framework (also referred to more broadly as a qualifications framework) offers potential significant economic and social benefits. It provides a common benchmark for diverse national training and qualifications systems that promotes the building of mutual trust and cooperation. It informs and provides guidance on ensuring that national skill standards are internationally accepted and up to date, and that teaching and learning materials are of high quality, and that assessment and certification are well established. Also, it facilitates the identification of the changing skills requirements. Finally, it is a way to reduce the barriers to the mutual recognition of skills and qualifications across countries, and thereby, promote labor market mobility with fair recognition of competencies, particularly among skilled migrant workers.

In response to rapid changes in the workplace and labor markets, many countries are increasingly exerting efforts to develop national qualifications frameworks. As industries are restructured and new products are developed, the nature of work has been changing, increasing demand for more flexible, adaptive and multi-skilled workers. Delineations between traditional occupations are becoming blurred necessitating a refocus of education and training from narrowly defined occupations and jobs to broader industries. Also, in many countries, there is a growing compulsion to address the needs of the unemployed, young school leavers, and older workers displaced as a result of economic structural changes in the context of adopting a more inclusive approach to education and training to enable all people, including women and traditionally disadvantaged groups to have more equitable access to work opportunities.

As summarized by a 2014 ILO Report, the emerging best practice is to develop a qualifications framework that features: 1) a “whole-of-industry” focus rather than being based on a single occupation or job with a restricted and static skill-set; 2) a basis for life-long learning and continuing flexible skills
acquisition; 3) integration of the development of skills, knowledge, attitudes, and values; and 4) giving workers options as the nature of work changes and the effects of globalization become even more apparent.

In 2010, the ASEAN Leaders enunciated their commitment to “develop national skills frameworks in AMS through sharing of experiences and best practices as a strategy to strengthen human resource development and management and to enable member States to raise their respective levels of skills standards, as an incremental approach towards an ASEAN skills recognition framework” (ASEAN, 2010, para. 11).

Towards this goal, many initiatives have been undertaken. The ILO has led a number of significant initiatives which include:

1. **Conducted an assessment of the readiness of AMS for implementation of the commitment to the free flow of skilled labor within the ASEAN Economic Community from 2015.**

   The ILO Report indicated that Malaysia and Philippines are ready for recognition of many occupational skills while Brunei Darussalam, Indonesia, Thailand, Singapore and Viet Nam for some occupations. With support, Cambodia, Lao PDR and Myanmar can be ready for recognition of key migrant worker occupations. It recommended that: 1) the ASEAN Secretariat take on a coordinating role among several agencies supporting AMS for skilled and professional mobility through the AEC; 2) the ASEAN Secretariat identify a focal international agency to partner and provide technical guidance and support for its lead coordinating role across AMS and development partners; 3) the ILO would have to further invest in priority skills areas (e.g. domestic work training and construction) for development of additional Regional Model Competency Standards (RMCS); and 4) the ILO should publish a booklet on good practice in the development of national competency standards and TVET qualifications and convene a training workshop for senior practitioners from all AMS.

2. **Designed the ASEAN Qualifications Reference Framework (AQRF) and secured the consensus of all AMS for its adoption.**

   The AQRF is designed as a common 8-level reference framework that will function as a translation device to enable comparisons of qualifications across participating AMS. It will cover Senior Schooling, Technical and Vocation Education and Training (TVET) and Higher Education. It will provide a clear basis for mutual recognition of both formal and informal learning. It has two components: the Mutual Recognition of Skills (MRS) designed to facilitate the free flow of skilled labor and the on-going development of ASEAN Mutual Recognition Arrangements (MRAs) for professional services.

   The ASEAN Secretariat has the lead coordinating role for the on-going development of MRAs in eight (8) professions, namely: Engineering Services, Nursing Services, Architecture, Land Surveying, Medical Practice, Dental Practice, Accountancy and Tourism. It should be noted that agriculture and related professions are not included.

   The ILO provides the lead coordinating role in establishing MRS for priority skills/occupations identified by individual AMS, as follows: Building /Masonry and Electrical Wiring for Cambodia; Construction sector, Tourism and Hospitality for Indonesia; Bricklaying and Plastering for Lao
PDR; Tourism and hospitality, and Housekeeping for Malaysia; Welding and Sewing machine operator for Myanmar; Tourism and Domestic work for Philippines; Construction and Sewing machine operator for Thailand; Tourism and hospitality, Housekeeping and Automotive technology for Viet Nam. It should be noted that agriculture and related sectors are not included.

3. **Developed Regional Model Competency Standards (RMCS) as instruments for MRS implementation.**

   An RMCS is a set of competency skills standards which acts as a generic guide to AMS developing their skills standards/competencies. Designed as a guide for a range of occupations across a certain industry, there are RMCS for Tourism and hospitality, Manufacturing, Welding, Domestic Work, Construction, Agriculture/Aquaculture, Mechanical services and even Generic Units/Generic Set of Selected Core Competencies.

V. **Competency Certification Systems**

This part is drawn largely from the information contained in the ASEAN Guiding Principles for Quality Assurance and Recognition of Competency Certification Systems that has been adopted by the 24th ASEAN Labor Ministers Meeting (ALMM) on May 15, 2016 in Vientiane, Lao PDR.

The document notes that AMS are in varying levels of development or implementation of their National Qualifications Framework (NQF). Table 6 provides a summary of their progress.

<table>
<thead>
<tr>
<th>Country</th>
<th>Level of Establishment</th>
<th>Stage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brunei Darussalam</td>
<td>Inaugurated 2013, implemented</td>
<td>6</td>
</tr>
<tr>
<td>Cambodia</td>
<td>Established 2012, initial stages of implementation</td>
<td>5</td>
</tr>
<tr>
<td>Indonesia</td>
<td>Established 2012, initial stages of implementation</td>
<td>5</td>
</tr>
<tr>
<td>Lao PDR</td>
<td>Planned</td>
<td>3</td>
</tr>
<tr>
<td>Malaysia</td>
<td>Established 2007, fully implemented and at review stage</td>
<td>8</td>
</tr>
<tr>
<td>Lao PDR</td>
<td>Planned</td>
<td>3</td>
</tr>
<tr>
<td>Philippines</td>
<td>Established 2012, initial stages of implementation</td>
<td>5</td>
</tr>
<tr>
<td>Singapore</td>
<td>Sector QF – Workforce Skills Qualifications system, Inaugurated 2005</td>
<td>7</td>
</tr>
<tr>
<td>Thailand</td>
<td>Established 2014, initial stages of implementation, established sub frameworks</td>
<td>4</td>
</tr>
<tr>
<td>Viet Nam</td>
<td>Planned</td>
<td>3</td>
</tr>
</tbody>
</table>

The stage categories used listed below.
1. No intent
2. Desired but no progress made
3. Background planning underway
4. Initial development and design completed
5. Some structures and processes agreed and documented
6. Some structures and processes established and operational
7. Structures and processes established for 5 years
8. Review of structures and processes proposed or underway
Among AMS, Brunei Darussalam, Malaysia, Singapore have only one responsible agency for NQF. Cambodia and Indonesia established their NQFs thru legislation. Thailand’s NQF was approved by Cabinet. Philippines established its NQF through an Executive Order. The purposes of NQF among AMS vary while similarities exist in terms of the ordering and specification of qualifications, the promotion of multiple pathways for learners, and for international recognition.

The development of NQF among AMS is driven by their interest and commitment to the creation of the free flow of skilled labor through “harmonisation and standardisation” (ASEAN 2007, p. 18) as called for under the ASEAN Economic Community Blueprint 2015. The adoption of the ASEAN Qualifications Reference Framework (AQRF) propelled the AMS to either develop NQFs or review their NQFs. The AQRF is a common reference framework that functions as a device to enable comparisons of qualifications across AMS. It addresses education and training sectors including non-formal and informal learning.

As explained in the Guidelines, certification is normally based on an assessment, usually includes a test, a performance assessment and/or a portfolio. It may include documented evidence of workplace experience prior to assessment. Some certification systems include a valid period of recognition and therefore may require re-certification while others may be valid for a lifetime having completed the prescribed requirements.

Certification may not necessarily mean being legally able to practice in a specific profession as this falls under licensing scheme which is usually defined under a specific law being implemented by a specific regulatory body normally in relation with the objective of protecting public interest and safety. There are cases that competency certification systems are outside and beyond the NQF even if they are established by government agencies or professional bodies or private enterprises. A country may have one or more competency certification systems being implemented by different institutions whether government, professional body or private firm. In some cases, a competency certification system may not issue qualifications but just a declaration of competencies achieved.

The overview of the competency certification systems of AMS are summarized as follows:

1. They generally focus on lower to middle level skills and are under the ministries of labor. However, autonomous bodies have been established in Indonesia with the Badan Nasional Sertifikasi Profesi (BNSP), and in Thailand with the Thailand Professional Qualification Institute (TPQI).
2. In many AMS, competency certification systems came ahead before the establishment of NQF, and sometimes, creating tensions between documented levels of competence and proposed NQF level descriptors and posing barriers to consensus and agreement. Newly established NQFs have often focused on integrating existing competency certification systems within the NQF.
3. In terms of certification levels, some AMS have established levels of competence with corresponding level descriptors. The competency certification system descriptors of the level of skills and knowledge also vary among AMS. In some instances, these are precursors to NQFs or separate from the NQF. Table 7 shows the variety in the skills levels adopted by AMS.

<table>
<thead>
<tr>
<th>Country</th>
<th>No. of Skills levels</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lao PDR</td>
<td>4 (+basic)</td>
</tr>
<tr>
<td>Malaysia</td>
<td>5</td>
</tr>
<tr>
<td>Myanmar</td>
<td>4</td>
</tr>
</tbody>
</table>
4. The documentation and assessment of competence are often affected by how it was defined. While AMS have different definitions for competence, they have agreed through the AQRF the following definition:

Competence is an ability that extends beyond the possession of knowledge and skills. It includes: i) cognitive competence involving the use of theory and concepts, as well as informal tacit knowledge gained experientially; ii) functional competence (skills or know-how), those things that a person should be able to do when they work in a given area; iii) personal competence involving knowing how to conduct oneself in a specific situation; and iv) ethical competence involving the possession of certain personal and professional values.

However, this agreement does not mean that AMS individually commits to change its respective national definition. Said definition is used in regional dialogues and initiatives.

5. Most AMS develop competency (occupational) standards within its TVET sector. In many cases, AMS use interchangeably the terms competency standard and occupational standard. They generally have a similar process of developing competency standards engaging private sector industry representation in many ways (e.g. technical working groups, industry sector endorsement meetings, employer groups, labor groups) and often using trainers or training institutions. The development process employs a mix of methods like DACUM, functional analysis, job task analysis, and international research, relying on existing training programs. Final endorsement is generally confirmed by the commissioning government agency, but in some instances final endorsement is a committee that includes industry sector representation (e.g. Lao PDR). In general, the format for standards in the broader vocational education and training sector follow a similar format, aligned with the ILO regional model competency standards. The format of the competency standard generally includes:

- Occupational background information
- Unit code and title
- Unit descriptor
- Unit of Competence
  - Elements and performance criteria
  - Variables and Range statement
  - Evidence guide

6. Most AMS divide a competency standard into core and elective, covering technical competencies and generic competencies. In competency certification schemes, the outcomes may or may not result in a qualification. However, in both instances, clusters of competency or occupational standards are grouped into occupational roles or qualifications. AMS use various terms for these clusters of standards and completion rules which are often supported by additional information, such as:
• Competency framework (Brunei Darussalam)
• Training regulations (Philippines)
• Workforce Skills Qualifications (WSQ) frameworks (Singapore)

7. While competency certification systems may include both training and assessment, some AMS have purely “assessment only” systems. The requirements for assessors across the AMS are generally articulated in quality standards (e.g. Singapore and Indonesia) or policies and guidelines (e.g. Philippines, Malaysia). Generally, the minimum requirement is for trainers and/or assessors to have at least the level of competence in the vocational content and skills as well as a qualification in teaching pedagogy and, in some cases, workplace experience. Sometimes, assessors are required to have a specific set of competencies related to competency-based assessment. In some AMS, trainer/assessor requirements are relatively new and not fully implemented. There are national registers for trainers (Philippines’ national TVET register and Thailand’s OVEC. Others with central control have registers of qualified assessors (e.g. Philippines and Indonesia both have a monitoring system for assessors).

8. Among AMS, quality assurance of service providers is normally under the remit of either one or two ministries, normally ministries of education or labor. Quality assurance arrangements vary and not necessarily applied consistently across all types of TVET providers.

Approval process could be:
- Not mandatory for specific cohorts of providers, but may be required by particular cohorts of providers with particular target group
- Assumed for particular providers, for example, government providers
- Mandatory for all providers to provide recognized qualifications under the NQF.

In most AMS, the approval of providers are expressly provided under specific laws or regulations or quality standards. The monitoring of providers and their outcomes are not well established for competency certification systems.

9. Assessment may be done as integral part of the training process or provided as “assessment only” services outside training. In some AMS, training provision is separated from assessment provision as a measure to attain a robust competency certification system as certification bodies adhere to ISO/EC 17024:2012 Conformity assessment which requires impartiality in certification activities.

Most AMS do not view “assessment only” services as a “recognition of prior learning” or “recognition of non-formal and informal learning”. Ms. A. Bateman, the consultant who helped prepare these Guidelines is of the view that they are technically one and the same as both involve the assessment of an individual’s competence without the assessor being involved in individual’s learning (regardless as to whether the learning was achieved through formal, non-formal or informal means).

Within this context, there is an urgent need to consider and explore the feasibility of implementing Concept Note No. 1— Non-formal and Informal Learning8 issued by the AQRF.

It documents the agreed understanding among AMS on the role of AQRF in encouraging the quality assurance of all learning achievements; the importance of recognizing non-formal and informal learning which are the main modes among agricultural workers in the light of the need to encourage the development of national approaches to validation of non-formal and informal learning.

10. To promote confidence in assessment decisions, they have to be valid and reliable. Validity is concerned about the justifiability of the assessment decision about a candidate (e.g., competent/not yet competent, a grade and/or a mark), based on the evidence of performance by the candidate. Reliability is concerned with how much error is included in the evidence. AMS employ varied approaches and implementation levels. Across the AMS, how confidence in the assessment decisions is promoted varies in terms of approach and level of implementation from approving assessment instruments or tools (e.g. Department of Skills Development in Malaysia) to auditing and use of external verification (e.g. Badan Nasional Sertifikasi Profesi [BNSP] – National Professional Certification Agency in Indonesia) to approving and monitoring assessors (e.g. Technical Education and Skills Development Authority [TESDA] in the Philippines) to using industry or enterprise representatives in the assessment or in post assessment review. Largely, the quality assurance of assessment decisions is identified as one of the biggest challenges for AMS competency certification schemes.

VI. Conclusions and Recommendations

The agricultural workers in the region face daunting challenges as the ASEAN moves towards “one market and production base”. Some may need to move out of the sector or even out of the country to compete for job opportunities but others will decide to stay by choice to pursue productive farming careers. Either way, they both have to have adequate forms of human capital as they come from a sector that has predominantly relied on non-formal and informal learning modes which do not bestow qualifications they direly need to compete in labor markets.

A practical approach to help them ably adjust to economic transitional shifts is to promote life-long learning and re-skilling, the widespread adoption of which can be driven by establishing a system of awarding “micro-credentials”. The existing competency certification systems may be put to this task. Another alternative is to explore the viability of the recognition of non-formal and informal learning that is already an existing feature of the AQRF.

The success of this endeavor will require the support and collaboration of all institutions - TVET, private enterprises, non-government organizations, farmers’ associations and government – multi-stakeholders partnership in which roles and responsibilities have been clearly defined and agreed upon in a consensus manner.
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Final Statement to the 4th HOM SEA TVET

(from the participants of the “Regional Workshop on Competency Certification for Agricultural Workers in Southeast Asia” held at SEARCA Headquarters, Los Baños, Laguna, Philippines on 9-10 May 2018)
PREAMBLE

WE, the representatives of TVET institutions from Brunei Darussalam, the Republic of Indonesia, the Lao People's Democratic Republic, Malaysia, the Republic of the Philippines, the Kingdom of Thailand, Timor-Leste, and the Socialist Republic of Viet Nam; of competency certification bodies from the Republic of Indonesia, Republic of the Philippines, and Kingdom of Thailand; of the Southeast Asian Ministers of Education Organization (SEAMEO) Secretariat, SEAMEO Regional Center for Vocational and Technical Education and Training (VOCTECH), and the SEAMEO Regional Center for Graduate Study and Research in Agriculture (SEARCA); of the International Labour Organization (ILO); and of private sector organizations involved in skills development of agricultural workers, gathered in Laguna, Philippines for the Regional Workshop on Competency Certification for Agricultural Workers in Southeast Asia convened by SEARCA and the Philippine Technical Education and Skills Development Authority (TESDA), and collectively reflected and reviewed the situation of competency certification for agricultural workers in the region.

RECALLING the concurrence of High Officials in the third meeting of the Southeast Asia Technical and Vocational Education and Training (SEA-TVET) under SEAMEO held in Kuala Lumpur, Malaysia on 23–25 May 2017 on SEAMEO SEARCA's proposal to conduct a study on competency standards for agricultural workers in Southeast Asia as a step forward in mapping national competency standards among the Southeast Asian countries;

REAFFIRMING that TVET plays a fundamental role in the provision of lifelong learning, up-skilling and re-skilling opportunities that enable workers to adjust to shifting labor market opportunities and changing career aspirations particularly in the context of the ASEAN initiatives towards establishing a single market and production base in the region;

REAFFIRMING that regional cooperation on TVET can synergize efforts towards addressing the challenges posed by regional integration, particularly on the lives and livelihood of waged agricultural workers and agriculture smallholders;

RECOGNIZING the significant labor market consequences of regional economic integration specifically in terms of increased labor mobility of waged agriculture workers who do not own farmlands and of the growing need for continuous improvement of productivity of smallholders as evidenced by the emerging results of the ASEAN integration;
RECOGNIZING the urgency to adopt an integrated skills development strategy in the context of lifelong learning for agricultural workers who acquire skills and knowledge largely through non-formal and informal learning modes provided by agriculture extension services systems in the region;

RECOGNIZING that TVET qualifications in the region are prevalently accorded through competency certification systems, and COGNIZANT of the efforts to integrate these competency certification systems into transparent, well-articulated, and outcome-based national qualifications frameworks that are to be linked to the ASEAN Qualifications Reference Framework (AQRF) which gives importance to the recognition of non-formal and informal learning; and

BEARING IN MIND the challenges in the uneven progress among countries in establishing national qualifications frameworks and in linking them to AQRF,

WE RECOMMEND that the High Officials Meeting on SEA-TVET consider the following actions in response to the challenges of improving the competencies of agricultural workers in the region.

1. TVET institutions should be encouraged and supported to increasingly assume proactive and transforming roles in assessing, validating and certifying skills and experience gained through non-formal and informal modes within a lifelong learning framework in order to provide learners and workers particularly those from agriculture and rural sectors access to flexible pathways to further learning, reskilling, upskilling and employment opportunities.

2. Efforts to strengthen and expand competency certification systems to cover recognition of non-formal and informal learning should pay closer attention to building capacity of assessors in TVET institutions, the quality assurance of recognition decisions and the application of information and communications technologies (ICT) to facilitate recognition processes.

3. In addressing these challenges, TVET institutions need to pursue well-designed and effectively coordinated partnerships and alliances with a broader range of stakeholders, in particular private organizations, non-government organizations and farmers’ and related associations, professional organizations and government agencies involved in the national provision of agricultural extension services as well as in mutual recognition of skills and knowledge of agricultural workers in the region.

4. Regional TVET networks and international cooperation initiatives can support and promote strategic discussions and exchange of relevant experiences in TVET’s transforming role in the recognition of non-formal and informal learning particularly in the context of implications of the ASEAN integration on mobility of waged agricultural workers and productivity improvement for agriculture smallholders.
PART IV.A.

SEARCA Progress Report to 4th HOM SEA TVET Narrative Report
Competency Certification for Agricultural Workers in Southeast Asia

A Progress Report
As of 4 September 2018

*Prepared by the SEAMEO Regional Center for Graduate Study and Research in Agriculture (SEARCA) for the 4th High Officials Meeting on Southeast Asia – Technical and Vocational Education and Training (SEA – TVET) held on 4-5 September 2018, Manila, Philippines*
Background

During the Roundtable Meeting at the Second High Officials Meeting (HOM) on Southeast Asia – Technical Vocational Education and Training (SEA–TVET) held on 12–14 May 2016 in Bali, Indonesia, it was agreed that a regional and national qualification reference framework and assurance framework are necessary to harmonize and internationalize TVET in Southeast Asia. This includes competency standards development and certification for various TVET skills among ASEAN Member States (AMS) including those in agriculture, which ironically compared to other sectors, has not been given enough attention and priority.

The SEAMEO Regional Center for Graduate Study and Research in Agriculture (SEARCA), mandated to promote agricultural and rural development in Southeast Asia, assisted SEAMEO in mapping competency standards development and certification for agricultural workers in Southeast Asia as part of its efforts to promote TVET under its education priorities in the region.

The Third HOM on SEA-TVET held in Kuala Lumpur, Malaysia on 23–25 May 2017 supported SEAMEO SEARCA’s proposed project titled “Towards the Development of Competency Standards of Agricultural Workers in the ASEAN Region” aimed at assessing the development of competency standards for agricultural workers in Southeast Asia. It was considered a step forward from previous agreement to map national competency standards among the Southeast Asian countries in order to promote harmonization initially with four priority industry areas – agriculture and fisheries, hospitality and tourism, mechatronics and construction.

SEAMEO SEARCA implemented and funded the project since October 2017 with the following outputs:
1. Assessment study of the current situation, gaps, and challenges of the AMS in developing competency standards for agriculture;
2. Regional Workshop on Competency Certification for Agricultural Workers in Southeast Asia; and
3. Set of recommendations to address the challenges of improving the competencies of agricultural workers in the region.

The study results have been validated through the regional workshop convened on 9–10 May 2018 in SEARCA Headquarters, Los Baños, Laguna, Philippines and jointly hosted by the Philippine Technical Education and Skills Development Authority (TESDA). Moreover, the regional workshop has drawn out a set of recommendations that are now elevated for consideration in the Fourth HOM on SEA-TVET on 4-5 September 2018.

Regional Workshop Statement

PREAMBLE

WE, the representatives of TVET institutions from Brunei Darussalam, the Republic of Indonesia, the Lao People’s Democratic Republic, Malaysia, the Republic of the Philippines, the Kingdom of Thailand, Timor-Leste, and the Socialist Republic of Viet Nam; of competency certification bodies from the Republic of Indonesia, Republic of the Philippines, and Kingdom of Thailand; of the Southeast Asian Ministers of Education Organization (SEAMEO) Secretariat, SEAMEO Regional Center for Vocational and Technical Education and Training (VOCTECH), and the SEAMEO Regional Center for Graduate
Study and Research in Agriculture (SEARCA); of the International Labour Organization (ILO); and of private sector organizations involved in skills development of agricultural workers, gathered in Laguna, Philippines for the Regional Workshop on Competency Certification for Agricultural Workers in Southeast Asia convened by SEARCA and the Philippine Technical Education and Skills Development Authority (TESDA), and collectively reflected and reviewed the situation of competency certification for agricultural workers in the region.

RECALLING the concurrence of High Officials in the third meeting of the Southeast Asia Technical and Vocational Education and Training (SEA-TVET) under SEAMEO held in Kuala Lumpur, Malaysia on 23–25 May 2017 on SEAMEO SEARCA’s proposal to conduct a study on competency standards for agricultural workers in Southeast Asia as a step forward in mapping national competency standards among the Southeast Asian countries;

REAFFIRMING that TVET plays a fundamental role in the provision of lifelong learning, up-skilling and re-skilling opportunities that enable workers to adjust to shifting labor market opportunities and changing career aspirations particularly in the context of the ASEAN initiatives towards establishing a single market and production base in the region;

REAFFIRMING that regional cooperation on TVET can synergize efforts towards addressing the challenges posed by regional integration, particularly on the lives and livelihood of waged agricultural workers and agriculture smallholders;

RECOGNIZING the significant labor market consequences of regional economic integration specifically in terms of increased labor mobility of waged agriculture workers who do not own farmlands and of the growing need for continuous improvement of productivity of smallholders as evidenced by the emerging results of the ASEAN integration;

RECOGNIZING the urgency to adopt an integrated skills development strategy in the context of lifelong learning for agricultural workers who acquire skills and knowledge largely through non-formal and informal learning modes provided by agriculture extension services systems in the region;

RECOGNIZING that TVET qualifications in the region are prevalently accorded through competency certification systems, and COGNIZANT of the efforts to integrate these competency certification systems into transparent, well-articulated, and outcome-based national qualifications frameworks that are to be linked to the ASEAN Qualifications Reference Framework (AQRF) which gives importance to the recognition of non-formal and informal learning; and

BEARING IN MIND the challenges in the uneven progress among countries in establishing national qualifications frameworks and in linking them to AQRF,

WE RECOMMEND that the High Officials Meeting on SEA-TVET consider the following actions in response to the challenges of improving the competencies of agricultural workers in the region.

1. TVET institutions should be encouraged and supported to increasingly assume proactive and transforming roles in assessing, validating and certifying skills and experience gained through non-formal and informal modes within a lifelong learning framework in order to provide learners and workers particularly those from agriculture and rural sectors access to flexible pathways to further learning, reskilling, upskilling and employment opportunities.
2. Efforts to strengthen and expand competency certification systems to cover recognition of non-formal and informal learning should pay closer attention to building capacity of assessors in TVET institutions, the quality assurance of recognition decisions and the application of information and communications technologies (ICT) to facilitate recognition processes.

3. In addressing these challenges, TVET institutions need to pursue well-designed and effectively coordinated partnerships and alliances with a broader range of stakeholders, in particular private organizations, non-government organizations and farmers’ and related associations, professional organizations and government agencies involved in the national provision of agricultural extension services as well as in mutual recognition of skills and knowledge of agricultural workers in the region.

4. Regional TVET networks and international cooperation initiatives can support and promote strategic discussions and exchange of relevant experiences in TVET’s transforming role in the recognition of non-formal and informal learning particularly in the context of implications of the ASEAN integration on mobility of waged agricultural workers and productivity improvement for agriculture smallholders.
PART IV.B.

SEARCA Progress Report to 4th HOM SEA TVET

PowerPoint Presentation
SEAMEO INITIATIVES ON SEA - TVET

• 2nd HOM on SEA-TVET agreed that a regional and national qualification reference framework and assurance framework are necessary to harmonize and internationalize TVET
SEAMEO INITIATIVES ON SEA - TVET

- Promotion of TVET is one of the seven education priorities of SEAMEO.
- SEAMEO SEARCA, having the mandate on ARD in the region, assisted SEAMEO in assessing the state of competency standards development and certification systems for agricultural workers in Southeast Asia.

SEAMEO SEARCA-funded Project
Competency Certification for Agricultural Workers in Southeast Asia

1. Research on situation of competency standards development and certification for agricultural workers identifying gaps, challenges, and recommendations to be addressed
2. Conducted jointly with TESDA a Regional Workshop
Recognized that

1. the on-going ASEAN economic integration increases mobility of waged agriculture workers who do not own farmlands and requires productivity improvement among smallholders;

2. the growing need to adopt an integrated skills development strategy in the context of lifelong learning for agricultural workers who acquire skills and knowledge largely through non-formal and informal learning modes provided by agriculture extension services systems throughout the region; and

3. TVET qualifications in the region are prevalently accorded through competency certification systems that are now being integrated into national qualifications frameworks linked to the ASEAN Qualifications Reference Framework (AQRF) that gives importance to the recognition of non-formal and informal learning.
Recommendations

1. TVET institutions have to increasingly assume transforming roles in assessing, validating and certifying skills and experience gained through non-formal and informal modes within a lifelong learning framework in order to provide learners and workers particularly those from agriculture and rural sectors access to flexible pathways to further learning, reskilling, upskilling and better employment opportunities.

2. Strengthening and expanding competency certification systems to cover recognition of non-formal and informal learning requires building capacity of assessors in TVET institutions, quality assurance of recognition decisions and application of ICT to facilitate recognition processes.

3. TVET institutions need to pursue partnerships and alliances with a broader range of stakeholders, in particular private organizations, non-government organizations and farmers’ and related associations, professional organizations and government agencies involved in the national provision of agricultural extension services as well as in mutual recognition of skills and knowledge of agricultural workers in the region.

4. Regional TVET networks and international cooperation initiatives can support and promote strategic discussions and exchange of relevant experiences in TVET’s transforming role in recognizing non-formal and informal learning of agricultural workers.
Thank you …
PART V

Proceedings of the “Regional Workshop on Competency Certification for Agricultural Workers in Southeast Asia”
PROCEEDINGS

REGIONAL WORKSHOP ON COMPETENCY CERTIFICATION FOR AGRICULTURAL WORKERS IN SOUTHEAST ASIA

SEARCA Headquarters, College, Los Baños, Laguna, Philippines
9-10 May 2018
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I take great pleasure in welcoming you to SEARCA and to this Regional Workshop on Competency Certification for Agricultural Workers in Southeast Asia. We are joined by delegations from neighboring countries, some of whom are first time visitors to Los Banos and to the Philippines. We extend our warmest welcome to you.

As a development organization working in and for the region the past 50 years, SEARCA believes that agriculture will continue to play a key role in driving overall development in this part of the world. This is because the majority of our people, an estimated 450 million, are engaged and employed in various agricultural activities and enterprises.

Undoubtedly, agricultural workers are key in efforts to raise farm productivity and to contribute to food and nutrition security and poverty alleviation at the national and regional levels. Coupled with this challenge, are opportunities ushered in by the ASEAN Economic Integration in terms of increasing agricultural trade and greater agricultural labor demand and movement within and between countries in Southeast Asia.

It is in this light that SEARCA initiated a project titled Towards Development of Competency Standards for Agricultural Workers in Southeast Asia. This Project, which has the approval and support of the High Officials of the Technical and Vocational Education and Training (SEA-TVET) of Southeast Asian countries, aims to assess progress in the development of competency standards for agricultural workers in the region, and identify gaps and challenges that each ASEAN Member State faces in this endeavor. Offhand, we realize that a wholistic approach is the more appropriate track to take. Competency standards would have to be viewed in the context of competency certification systems. Therefore, this project will help jumpstart the recognition of competency certification systems for agricultural workers and facilitate implementation of the so-called “ASEAN Guiding Protocols for Recognition”. Part of the project is the conduct of this Regional Workshop we are having now.

In this workshop our goal is to at least initiate the process of mutual recognition of competency certifications between and among ASEAN Member States (AMS). We are very glad to have with us representatives of competent bodies in selected AMS to present their respective country’s competency certification schemes. Outputs of this workshop will form part of the recommendations to be presented in the 4th SEA-TVET High Officials Meeting in September to be
hosted by the Philippines through TESDA. An underlying objective is to promote skills recognition of agricultural workers in the region.

All these are steps towards a bigger initiative at the ASEAN level that will ensure equitable access to job opportunities and skills development trainings for our agricultural workers. These will also ensure that they become more productive members of our respective country’s agricultural workforce, while at the same time, guarantee that their acquired competencies are recognized and competitive wherever they are or choose to go in the region.

Finally in closing, allow me to reiterate my sincere appreciation to TESDA/Secretary Mamondiong, for co-organizing this important workshop with us. I also thank our honored guests, speakers, and participants, especially Senator Cynthia Villar, for once again honoring us with her presence and supporting yet another one of our initiatives intended to benefit the agriculture sector in the Philippines and our neighboring countries in the region.

MR. GUILING A. MAMONDIONG
Secretary/Director General
Technical Education and Skills Development Authority (TESDA), Philippines

We are gathered here today to discuss Southeast Asia initiatives pertaining to competency certification for agricultural workers, with a focus on providing valuable inputs towards advancing the state of agriculture in Southeast Asia. Following the agreements reached during the SEAMEO 2nd High Officials Meeting (HOM) on Southeast Asia – Technical Vocational Education and Training (SEA-TVET), this workshop shall provide an avenue for all ideas pertaining to the standardization of the agricultural sector and the development of competency assessment and certification—a important endeavor if we are to upgrade our agricultural systems and technologies.

Indeed, the significance of an agriculture sector with standardized qualifications and competencies must not be undervalued. Various researches conducted by SEAMEO and other organizations have shown that having a standardized assessment and certification in place is crucial for workers to equip themselves with the necessary skills and knowledge to meet industry demands.

It is necessary that we develop such systems to ensure the continuous prosperity of our workers in the agriculture sector and adapt to the structural changes our countries have undergone. As mentioned in the 2017 publication of the Organization for Economic Co-operation and Development (OECD) and the Food and Agriculture Organization of the UN (FAO), the relative
Contribution of the agriculture sector in GDP and employment declined in most countries between 1996 and 2014. We must look towards more cost-effective and efficient solutions to ensure our agricultural demands are still met.

What is needed now to address this issue is to shift to a higher-value agricultural production, which requires competency on higher-level agricultural technologies and skills. We must consider the development of the agriculture sector through an industry-led assessment and certification, which would equip our agricultural workforce with the necessary skills to be more productive and meet industry demand.

As the authority in Philippine TVET, we have developed the National Technical Education and Skills Development Plan (NTESDP) for 2017 to 2022, which is the country’s blueprint for the technical vocational education and training (TVET) sector. The NTESDP – now in its third cycle – has identified the agriculture sector as one of its priority development areas, thus giving premium on the issues and challenges that must be addressed in the sector.

Part of our role as the authority in TVET is ensuring the adherence of TVET providers in the Philippines to TESDA-promulgated training regulations, which serves as basis for the development of competency-based curriculum and competency assessment and certification. There are technical vocational institutions that offer more than 100 agri-courses registered with TESDA.

Likewise, to expand the capacity of our agriculture sector, we have adopted the farm school approach developed by the Food and Agriculture Organization of the UN, which organizes farmers to communicate best practices and transfer technology and skills among their community. Implemented through TESDA’s Program on Accelerating Farm School Establishment or PAFSE, we are able to contribute to rural development by providing access to TVET for our farmers and fisherfolks. Done in close coordination with the Department of Agriculture – Agriculture Training Institute (DA-ATI) and the Department of Agrarian Reform (DAR), PAFSE aims to accelerate the establishment of farm schools in all municipalities nationwide. It also provides scholarship grants to farmers and fisherfolks to assist them in building the capacity and capability of their farms through various trainings on green skills development, new technologies and agro-entrepreneurship.

Committed to our mandate of providing relevant, efficient, accessible, and high-quality technical education and skills development opportunities to the Filipino people, TESDA gives its full support and cooperation towards strengthening the region’s agriculture sector.

Before I end my talk, I would like to thank our partner and co-host of this event, SEARCA for hosting this workshop with us. We are confident that with everyone’s participation we shall be able to come up with sound recommendations pertaining to the promotion of skills recognition of agricultural workers in our region.
With that, ladies and gentlemen, I wish you all a productive, collaborative and meaningful Workshop. Good day and God bless us all!

SENATOR CYNTHIA VILLAR
Chairperson
Senate Committee on Agriculture and Food, Senate of the Philippines

Thank you to the Southeast Asian Regional Center for Graduate Study and Research in Agriculture (SEARCA) and the Technical Education and Skills Development Authority (TESDA) for inviting me to be part this Regional Workshop on Competency Certification for Agricultural Workers in Southeast Asia.

I am glad to be here with all of you today. Especially since, I really do share the intent and goals of your endeavours to develop the competencies of agricultural workers since those are truly essential in not only raising agricultural productivity and in adopting innovative farming processes or technologies, but moreover in raising their standards of living, income levels and helping them beat poverty.

Farmers and fisherfolks, remain among the poorest here in the Philippines. Poverty figures since the 1980s show that the concentration of the poor has been in the agriculture sector. Latest available statistics show that farmers and fishermen posted the highest poverty incidences in 2015 at 34.3 percent and 34 percent, respectively, vis-à-vis the poverty incidence for the general population, which was at 21.6 percent.

Twenty-two percent of our country’s population are still living below poverty line and 40 per cent of them are farmers and fisherfolks.

Agricultural workers are among the lowest paid. Last year, based on data, the average daily basic pay of wage and salary workers in the agriculture industry is 210.13 pesos compared to those in non-agriculture industry which receive 441.44 pesos. So, there is quite a discrepancy there.

In fact, if we really wanted to make a significant mark in poverty reduction on the national level, helping farmers, fisherfolks and agricultural workers is the best way, since about two-thirds of the country’s population are involved directly or indirectly, in the agriculture sector.

Thus, as a senator and chairperson of the Senate Committee on Agriculture and Food, I have been focused on removing all the barriers that prevent them from being more competitive and profitable. These are lack of technical expertise, inadequate access to cheap credit, lack of mechanization and financial literacy.
Increasing food production and farm productivity alone cannot move them permanently out of poverty. We must also teach small farmers capacity-building strategies and approaches to level up their knowledge and knowhow. And I believe continuing education and training is the key.

As a legislator, there is a conscious effort on my part to make sure that my proposed bills in the Senate have a provision or component that will support training, education, mechanization, research and development (R&D) among others. These include the enactment into law of Republic Act (RA) 10848 or the act extending the period of implementation of the Agricultural Competitiveness Enhancement Fund (ACEF) up to year 2022. You see, in 2010, ACEF loans and grants were stopped due to collection issues. ACEF was supposed to expire on December of 2015 and we successfully passed the extension of the ACEF law. ACEF can provide a level field in access to not only education and training, but opportunities to modernize and mechanize existing facilities or operations.

Eighty percent (80%) of the (ACEF) fund will be in the form of credit with minimal interest, which shall not exceed five million pesos per project loan to cooperatives; and maximum of one million pesos to small farmers. For the remainder of the fund of 20 percent—ten percent (10%) will be extended as grants for R&D of agricultural and fishery products, and the commercialization of such, including the upgrading of research facilities, of qualified state universities and colleges (SUCs); and ten percent (10%) will be used for the funding of a comprehensive scholarship and attractive grant-in-aid program for agriculture, forestry, fisheries, and veterinary medicine education, to be implemented by the Commission on Higher Education (CHED).

Besides the ACEF law, in all the other bills I have authored for the fisheries, sugar and other agricultural sectors, that have been passed into law, I made sure that there is an allocation of adequate funds to provide for R&D and further education/training/improvement of farmers, fisherfolks and agricultural workers.

As the primary author of the Farm Tourism Development Law or Republic Act (RA) 10816, I also emphasized training and education under the law. It is provided there that the Agricultural Training Institute (ATI) and TESDA “shall encourage farm tourism camps to become learning sites and accredited extension service providers, and the TESDA shall accredit farm tourism camps as technical vocational institutions for agriculture and tourism courses”. So, many have also established farm schools or learning centers. I help them get accredited by TESDA as well.

And to show that I practice what I preach or provide for in the legislations that I have passed into laws, I myself have put up, through the Villar Social Institute for Poverty Alleviation and Governance (Villar SIPAG), two farm schools—in Cavite and Bulacan. In partnership with various agencies under the Department of Agriculture (DA) such as the Agricultural Training Institute (ATI), Bureau of Fisheries and Aquatic Resources (BFAR, Bureau of Animal Industry (BAI) as well as private organizations such as Allied Botanicals, SM Foundation, East West Seeds and others, we provide free training workshops and seminars.
Through further training and education also, farmers are learning new methods of doing things as well as new equipment and technology to assist them.

Coconut farmers for example, who are among the poorest earning 50 pesos a day only. They are now aware that by merely intercropping coconut with other crops such as coffee or cacao, they could earn PhP10,000.00 a month. Moreover, if they plant using the new variety of coconut seedlings, their nut harvest can triple from 40 nuts per tree to 150 nuts per tree.

As for the rice farmers, if they use the inbred seedlings of the Philippine Rice Research Institute (PhilRice), they can increase their production from four metric tons per hectare (4MT/ha) to six metric tons (6MT/ha), which will make our country self-sufficient in rice. And it can also double the income of rice farmers.

You are correct in pointing out also that with the ongoing ASEAN economic integration, there is a need to focus on enabling agricultural workers to have equitable access to high-quality learning and skills recognition that make them competitive in the growing and changing ASEAN labor markets. I have been repeatedly pointing that out myself. Markets and industries have indeed levelled up along with more intense competition under the ASEAN Economic Community (AEC).

As you know, the regional economic integration, under the ASEAN Economic Community or AEC, has transformed ASEAN into “a single market and production base, a highly competitive economic region, a region of equitable economic development, and a region fully integrated into the global economy.” The creation of a single market and production base is geared towards the free flow of goods, services, investment, capital, skilled labor among others.

As a result, on top of stiffer competition, there are new challenges and standards that have to be met and complied with. Under the AEC, ASEAN countries have moved towards standardizing practices and food safety systems such as adoption of Good Agriculture Practices, Good Aquaculture Practices, Good Animal Husbandry Practices, Good Hygiene Practices, Good Manufacturing Practices, and Hazard Analysis Critical Control Point or HACCP-based systems among others. All of which required new competencies of course.

As agricultural workers receive the needed or required training and development of their skills, it will really be ideal to have their competencies recognized and certified as what SEARCA and TESDA are aiming to put into place through this workshop. Establishing competency standards of agricultural workers in Southeast Asia seem to be the next step in our bid to develop not only the competence, but also the competitiveness, of agricultural workers.

On that note, as I cited earlier, we have the same goals here and I support your commitment to raise and recognize the competencies of agricultural workers. Thank you again and more power to all of you!
Agriculture is the foundation of civilization and an important pillar for sustainable livelihood. It is the basic source of food supply of all the countries – whether underdeveloped, developing, or even developed. He emphasized the importance of agriculture as the backbone of an economy, which provides the basic ingredients to mankind and now raw materials for industrialization.

Lessons drawn from economic history of many advanced countries tell us that agriculture prosperity contributed significantly in fostering economic advancement. Without agriculture, the world couldn’t possibly have grown anywhere even close to the current levels.

If agriculture fails to meet this rising demand of food products, it will adversely affect the economic growth of a country. Agricultural advancement is therefore necessary for improving the supply of raw materials.

To keep up with this growing demand, food production will have to increase by 60-70 percent compared to a decade ago. Ideally, Southeast Asia’s farms could simply expand their production. But probably ill-equipped to do so. To produce a sufficient amount of food, Southeast Asia’s farms will need to undergo a 21st century transformation. It is time to fundamentally change agriculture from the destructive practices of the past to regenerative agriculture. The good news is that regenerative agriculture has been advancing scientifically and technologically all along while the rest of the world experimented with unsustainable “green revolution” agriculture.

Agriculture and Food and horticulture are key sectors throughout Southeast Asia, accounting for a substantial share of the region’s GDP and employing an important part of the workforce. In the meantime, unemployment will always exist – in Southeast Asia as well as other parts of the world. It’s how the situation is managed that is important, and there are actions that we can take. According to ILO, Southeast Asian countries are continuing to create jobs – but they often remain of poor quality. Many in SEA countries, while technically employed, are still struggling to make ends meet. The paradox is that while unemployment grows in some areas, millions of jobs remain unfilled. This happens because those looking for a job possess the wrong or minimal skills – or lack the right skills in particular jobs. Young people today need to be armed with the skills that hiring organizations are looking for.
The increase in population size, climate change, rising levels of prosperity and urbanization constitute major challenges for most of the Southeast Asia countries, which calls for innovative solutions. Without urgent action, a country risks being left behind on their productivity to prepare their citizens for better future. The fourth industrial revolution – that collision of related technologies, such as automation, artificial intelligence, machine learning, blockchain, the internet of things, brain enhancement, additive manufacturing, synthetic biology and data analysis – will fundamentally change the nature of jobs including in agricultural sector.

Looking deep into the problem, this is where companies and organizations have a role to play: temporary jobs, internships and apprenticeships can provide a means of getting the first opportunity and a food in the door. However, for many organizations, including those in the ASEAN region, this means re-considering the composition of their workforce. The concept of “one job for life” is fast becoming history.

The implications for the education sector are clear: create graduates who are more agile, have a solid understanding of how the workplace works and can see how their skills fit into it, and prepare them for the idea of moving across jobs and sectors.

The specific needs of agriculture industry makes it impossible to create one-size-fits-all solutions, but successful university/education institution, business and other agencies collaborations could include for example: the scheme of paid student internships in industry which places students and graduates in small and medium enterprises; employees being paid to study, with modules developed specifically for the funding employer who sees students study part-time for a tailored degree while working full-time for the company; joint curriculum design that identifies skills gaps that the university could help to fill; academic entrepreneurship where development and commercial exploitation of technologies pursued by academic inventors through a company they partly own (spin-off companies). Furthermore, for the workforce in the system, it is important to accredit skills and evaluate competencies in order to certify agricultural day workers and, therefore, improve their employability and foster continuous training.

The workshop is an important moment to start to think out of the box for successfully producing high-skills graduates and workforce to certify the necessary skills that could benefit the improvement of agriculture in the future.
During the Third Meeting of High Officials representing the member countries of the Southeast Asian Technical and Vocational Education and Training (SEA-TVET) held in Kuala Lumpur, Malaysia on 23–25 May 2017, an agreement was reached for the Southeast Asian Regional Center for Graduate Study and Research in Agriculture (SEARCA) to conduct a study on competency standards for agricultural workers in Southeast Asia.

The study aims to provide background information on the state of competency certification for agricultural workers in selected countries in the region. It also aims to discuss and draw out possible recommendations to the 4th SEA-TVET HOM later in the year.

He cited challenges being faced by agriculture such as decreasing contribution to Gross Domestic Product among ASEAN Member States (AMS), decreasing share in employment, and increasing labor migration to fellow AMS. But despite these phenomena, agriculture still plays a critical role, being the engine of growth of the economies and important for food nutrition and security. In the future, it has to become more sustainable and climate change-proof.

He defined two types of agricultural workers. Smallholders are small-scale farmers, pastoralists, forest keepers, fishers who manage areas varying from less than one hectare to 10 hectares; characterized by family-focused motives such as favoring the stability of the farm household system, using mainly family labor for production and using part of the produce for family consumption. Waged agricultural workers are men who labor in crop fields, orchards, glasshouses, livestock units, and primary processing facilities to produce the food and fibres. They are employed on small-and medium-sized farms as well as large industrialized farms and plantations. They do not own or rent the land on which they work nor the tools and equipment they use. He said both need support in terms of lifelong learning and continuous re-skilling opportunities. He mentioned a World Economic Forum report citing that “micro-credentials” or qualifications are the driver of lifelong learning and re-skilling and that private sector and non-government organizations can play a critical role in this.

Mr. Justimbaste cited a United Nations Educational, Scientific and Cultural Organization – International Fund for Agricultural Development (UNESCO-IFAD) study in Cambodia in 2014 on learning and skills development which shows that:
• Perceptions of young people on learning agricultural skills and knowledge differ depending on age and marital status. Young married are more interested while unmarried young want to work where they can socialize.
• Skills learning is predominantly done through learning by observation from family members and neighbors.
• Formal education is seen as a passport out of agriculture, particularly among young women.
• Different learning modes are associated with different service providers: private, NGOs, government and media. They are eager to join training programs done by private sector providers as profits and risks are shared.

He cited another study showing ASEAN countries that have public-sector dominated extension service system such as in Brunei, Malaysia, Myanmar, Philippines and Singapore while countries that have pluralistic extension service system include Cambodia, Indonesia, Laos, Thailand, and Vietnam. He mentioned Grow Asia, a multi-stakeholder partnership platform, interventions on facilitating financial access including knowledge, training and skills training in best agricultural practices either related to farming techniques, efficient use of resources, and financial literacy and business management.

He also cited ASEAN policy and efforts towards skills recognition, the ASEAN Qualifications Reference Framework, and National Qualifications Framework which will be discussed further by succeeding presentations.

He mentioned the four components of the ASEAN Competency Certification Systems as:

• Competency standards,
• Assessors,
• Certification, and
• Quality Assurance.

He stated the agreed definition of competency as an ability that extends beyond the possession of knowledge and skills. It includes:

i) cognitive competence involving the use of theory and concepts, as well as informal tacit knowledge gained experientially;
ii) functional competence (skills or know-how), those things that a person should be able to do when they work in a given area;
iii) personal competence involving knowing how to conduct oneself in a specific situation; and
iv) ethical competence involving the possession of certain personal and professional values.
He offered the following conclusions and recommendations:

- There is a compelling case to expand skills recognition for agricultural workers to drive lifelong learning and reskilling in the region.
- TVET institutions will play a critical role in expanding the competency certification systems to recognize the non-formal and informal learning of agricultural workers, both waged workers and smallholders.
- Expansion of competency certification system will have better success if founded on partnership and collaboration with various interest groups from private enterprises, non-government organizations and even farmers’ associations.

**MS. AKIKO SAKAMOTO**

*Skills and Employability Specialist, International Labour Organization*

Ms. Sakamoto described the key characteristics of the rural economy and agricultural sector as follows:

- Rural share of total population has been declining;
- Agriculture is still the dominant and main source of incomes and livelihoods in the rural economy (although it may be declining); and
- Yet, rural and urban gaps persist, in terms of incomes, of quality of jobs, and of access to basic social services including education and training. In terms of the wage gap, rural wages are nearly 20-40 percent lower than urban wages. In general, urban and off-farm employment offer better quality jobs and high-skills job opportunities.

Technology can transform rural economy and the agricultural sector – remote control and monitoring of soil moisture and composition, big data analysis, Information and Communications Technology for livestock.

Agriculture and farming may look quite different in the future because of changing environment and will have implications on the types of jobs that will be available as well as the skills requirement to perform these tasks. And it will keep on changing so that continuous skills upgrade is needed. There are two avenues of policy related to this: one is on improving skills, and the other is recognition of skills.

People in the rural areas may have lower education, but that does not necessarily mean that they don’t have the skills and competence. So recognition of a certification is a formal recognition of their competence, a Recognition of Prior Learning (RPL).
Recognition of Prior Learning is a system to identify, assess and certify a person’s knowledge, skills and competencies regardless of how, when or where the learning occurred, against prescribed standards for a part (modular) or full qualification (ILO 2015).

Its potential benefits include:

- Improve the employability and working conditions in the workplace meaning increased access to formal employment, increased incomes, increased upward and horizontal job mobility;
- Give incentives for further education and training, enabling entry to formal education and training, and avoiding repeating training for the skills that the worker possess;
- Increased self-esteem and social recognition;
- Increase the number of TVET certified workers;
- Facilitate skills recognition in labour migration; and
- Address skills shortages.

A case study that tested the impacts of RPL in the agriculture sector was conducted in India, and the results were: some but limited increase in incomes, a significant increase in the awareness of occupational safety and health issues, increased social recognition and status, and a very significant increase in the interest in future education/training.

The challenges include a low awareness of the RPL, low literacy and numeracy, low interest that is linked with low values attached to certificates, and high demand on administration and technical capacity for quality assurance.

Lessons learned include the importance of RPL in pre-assessment orientation, adjustment in assessment methods given the low literacy and numeracy rates in terms of oral and written demonstration of competency, usefulness of a combination with supplementary training to fill skills gaps before assessment.

ILO’s perspective on RPL is that it’s a systematic approach which involves processes of counselling, facilitation, assessment and certification that are supported by measures such as awareness raising, quality assurance, appeals and skills gap training.

Quality assurance is one of the most important aspects of skills recognition, especially if you will move workers across borders

ILO’s key resources on RPL include two Guidelines:

1. Recognition of Prior Learning (RPL) Learning Package
2. Regional Model Competency Standards: Agriculture and aquaculture

Ms. Sakamoto described future prospects as follows:
Technology transformation in the sector further increases the importance of skills upgrading and reskilling of workers;

As certification can increase in interest in further training, increased effort in certifying agriculture workers can play a significant role in supporting the transformation process;

Types of skills that can be certified should have broader scope to include solid foundation and generic skills; and

Technological transformation also holds a key for attracting young people to the sector.

MS. IRENE M. ISAAC
Philippine Representative to the ASEAN Qualifications Reference Framework (AQRF) Committee and Former TESDA Director General

Ms. Isaac reported that the AQRF is currently on Phase 4; phase 1 was about laying the foundation, phase 2 was about task force meetings in putting together concepts, principles, and procedures for the AQRF, phase 3 was about capability building for those in the task force, phase 4 is the implementation of the framework. Referencing is not about imposing framework but a neutral referencing framework

The purpose of the AQRF is to enable comparisons of qualifications across ASEAN Member States that will:

- Support recognition of qualifications,
- Encourage the development of qualifications frameworks that can facilitate lifelong learning,
- Encourage the development of national approaches to validating learning gained outside formal education,
- Promote and encourage education and learner mobility,
- Promote worker mobility,
- Lead to better understanding of qualifications systems, and
- Promote higher quality qualifications systems.

AQRF’s Basic Principles are cited as follows:

1. The AQRF is based on agreed understandings between AMS and invites voluntary engagement from each Member State. The AQRF by design aims to be a neutral influence on the NQFs of AMS. The aim is to make national qualifications systems explicit according to the AQRF and does not require changes to national qualifications systems. The AQRF
respects each Member State’s specific structures and processes which are responsive to national priorities.

2. The process for endorsing the AQRF shall be by mutual agreement of the AMS.

3. The AMS will be able to determine when they will undertake the processes of referencing their qualifications framework, system or qualifications types and quality assurance systems against the AQRF.

The AQRF is a common reference framework, functioning as a translation device to enable comparisons of qualifications across AMS. It addresses education and training sectors and the wider objective of promoting lifelong learning. In the AQRF, education sector is defined in a broad sense as incorporating informal, non-formal and formal learning. It is based on broad level descriptors which include eight levels of complexity of learning outcomes. There are two domains in the Level descriptors:

- Knowledge and skills, and
- Application and responsibility.

It uses learning outcomes as the metric for the hierarchy. Different countries may have different levels, different education systems but the understanding is through a referencing system which is the AQRF. Its different neutral level descriptors are shown below:

<table>
<thead>
<tr>
<th>Knowledge and Skills</th>
<th>Application and Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Demonstration of knowledge and skills that:</strong></td>
<td><strong>The contexts in which knowledge and skills are demonstrated:</strong></td>
</tr>
<tr>
<td><strong>Level 8</strong></td>
<td><strong>Level 7</strong></td>
</tr>
<tr>
<td>- is at the most advanced and specialised level and at the frontier of a field</td>
<td>- is at the forefront of a field and show mastery of a body of knowledge</td>
</tr>
<tr>
<td>• involve independent and original thinking and research, resulting in the creation of new knowledge or practice</td>
<td>• involve critical and independent thinking as the basis for research to extend or redefine knowledge or practice</td>
</tr>
<tr>
<td>- are highly specialised and complex involving the development and testing of new theories and new solutions to resolve complex, abstract issues</td>
<td>- are complex and unpredictable and involve the development and testing of innovative solutions to resolve issues</td>
</tr>
<tr>
<td>- require authoritative and expert judgment in management of research or an organisation and significant responsibility for extending professional knowledge and practice and creation of new ideas and or processes</td>
<td>- require expert judgment and significant responsibility for professional knowledge, practice and management</td>
</tr>
<tr>
<td>Level 6</td>
<td>is specialised technical and theoretical within a specific field</td>
</tr>
<tr>
<td>---------</td>
<td>-------------------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>involve critical and analytical thinking</td>
</tr>
<tr>
<td>Level 5</td>
<td>is detailed technical and theoretical knowledge of a general field</td>
</tr>
<tr>
<td></td>
<td>involve analytical thinking</td>
</tr>
<tr>
<td>Level 4</td>
<td>is technical and theoretical with general coverage of a field</td>
</tr>
<tr>
<td></td>
<td>involve adapting processes</td>
</tr>
<tr>
<td>Level 3</td>
<td>includes general principles and some conceptual aspects</td>
</tr>
<tr>
<td></td>
<td>involve selecting and applying basic methods, tools, materials and information</td>
</tr>
<tr>
<td>Level 2</td>
<td>is general and factual</td>
</tr>
<tr>
<td></td>
<td>involve use of standard actions</td>
</tr>
<tr>
<td>Level 1</td>
<td>is basic and general</td>
</tr>
<tr>
<td></td>
<td>involve simple, straightforward and routine actions</td>
</tr>
</tbody>
</table>

Quality Assurance is the planned and systematic processes that provide confidence in educational services provided by training providers under the remit of relevant authorities or bodies’. It is underpinned by a set of agreed quality assurance principles and broad standards related to:

- The functions of the registering and accrediting agencies,
- Systems for the assessment of learning and the issuing of qualifications, and
- Regulation of the issuance of certificates.

The Referencing Process involves the 11-point Referencing Criteria:
• education and training system,
• mandate of relevant national bodies,
• inclusion of qualifications in the NQF,
• link between the qualification levels in NQF and AQRF,
• basis of standards in the qualification system,
• quality assurance system for education and training,
• involvement of public and private stakeholders,
• involvement of external experts,
• published national report,
• outcome of referencing published nationally and by ASEAN, and
• clear indication of level of referenced qualifications

The Pre-conditions for Referencing are as follows:

• seen in the country as an enhancement to regional cooperation,
• capacity building is underway with regard to understanding and using the AQRF,
• governance and management structures are in place,
• quality assurance in the qualifications system is effective,
• links with other contexts for quality assurance are clear, and
• raised awareness of linked projects.

In the Referencing Process, the AMS needs to voluntarily submit:

1. The Referencing Report which includes the state of the report, Executive summary, Description of the NQF, referencing process followed, responses to criteria items, further information and annexes.
2. Peer Evaluation and Endorsement. The AQRF Committee to consider whether or not a referencing report submitted by an AMS meets the AQRF referencing criteria.

AQRF Referencing Criteria

1. The structure of the education and training system is described.
2. The responsibilities and legal basis of all relevant national bodies involved in the referencing process are clearly determined and published by the main public authority responsible for the referencing process.
3. The procedures for inclusion of qualifications in the national qualifications framework or for describing the place of qualifications in the national qualifications system are transparent.
4. There is a clear and demonstrable link between the qualifications levels in the national qualifications framework or system and the level descriptors of the AQRF.
5. The basis in agreed standards of the national framework or qualifications system and its qualifications is described.
6. The national quality assurance system(s) for education and training refer(s) to the national qualifications framework or system are described. All of the bodies responsible for quality assurance state their unequivocal support for the referencing outcome.

7. The process of referencing has been devised by the main public authority and has been endorsed by the main stakeholders in the qualifications system.

8. People from other countries who are experienced in the field of qualifications are involved in the referencing process and its reporting.

9. One comprehensive report, setting out the referencing and the evidence supporting it shall be published by the competent national bodies and shall address separately and in order each of the referencing criteria.

10. The outcome of referencing is published by the ASEAN Secretariat and by the main national public body.

11. Following the referencing process all certification and awarding bodies are encouraged to indicate a clear reference to the appropriate AQRF level on new qualifications certificates, diplomas issued.

Ms. Isaac mentioned that the three most relevant criteria to the discussion at hand are criteria numbers 3, 5, and 6:

Criterion 3 - The procedures for inclusion of qualifications in the national qualifications framework or for describing the place of qualifications in the national qualifications system are transparent.

From Referencing Guidelines Section 5. Meeting the Requirements of the Referencing Criteria: Amplification

- The purpose of this criterion is to make clear to people outside the country how a qualification is allocated to a level in the NQF.
- The qualifications in the country are described in terms of the education provision of the country.
- The NQF level of all qualifications need to be evident in the report.
- The referencing report needs to describe the logic that allows the links between NQF levels and AQRF levels:
  - What criteria and procedures are used to make decisions on inclusion
  - What are the technical evidence that supports such decision?
  - What other evidences are used?
  - How are the evidences combined to formulate a single decision?
- Information in the register or database needs to be included in the referencing.

Criterion 5 - The basis in agreed standards of the national framework or qualifications system and its qualifications is described.
Reflective Questions:

- Has the report clearly described the range of standards that are currently used in the qualifications system, for example published educational and occupation standards, assessment or qualification standards, standards used by businesses?
- Does the report explain how the sets of standards are applied to ensure consistency of the quality of qualifications?
- Does the report clearly describe the role of learning outcomes in the standards used?
- Has the report explained the plans for continuous improvement of the quality of qualifications?
- Has the report clearly outlined how the validation of non-formal and informal learning is validated so that outcomes can be recognized alongside those from other routes to qualifications?
- Does the report clearly describe the use of credits and outlined the level of implementation of a credit system? Has the report adequately outlined how the NQF is used to support validation processes and credit systems?

Criterion 6 -The national quality assurance system(s) for education and training that refer(s) to the national qualifications framework or system are described. All of the bodies responsible for quality assurance state their unequivocal support for the referencing outcome.

Reflective Notes:

- Referencing reports need to explain the main national quality assurance systems that operate in the education training and qualifications system. Other quality assurance measures that could be addressed include for example qualifications requirements for teachers and trainers, accreditation and external evaluation of providers or programmes, relationship between bodies responsible for quality assurance.
- Benchmarks for evaluating quality assurance processes for all education and training sectors may be based but not limited to the following quality assurance frameworks:
  - East Asia Summit Vocational Education and Training Quality Assurance Framework,
  - INQAAHE (International Network for Quality Assurance Agencies in Higher Education), and
  - ASEAN Quality Assurance framework (ASEAN Quality Assurance Network).

In the Philippines, Republic Act No. 10698 institutionalized the Philippine Qualifications Framework and big part of it is communicating the framework to stakeholders and the public.
The question that is always asked is “what is in it for me”. The value to ordinary Filipinos is the credit that is ascribed to agreed learning outcomes through certification of competencies.

In terms of governance and structure she explained that National AQRF Committees report to the ASEAN AQRF Committee which has a AQRF Secretariat, the Committee then reports to the ASEAN Economic Ministers, ASEAN Education Ministers, and ASEAN Labour Ministers.

Ms. Isaac reported that the ASEAN AQRF Committee will be meeting the following week and that there will be three referencing reports by Thailand, Malaysia, and the Philippines, that will be evaluated by the Committee.

**Open Discussion**

A participant from TESDA Rizal, Philippines, gave a comment on the definition of waged agricultural workers. He said that based on the definition, they would fall under levels 1 and 2 in the Philippine Qualifications Framework (PQF) while smallholders will fall under level 5. As such, he expressed that TESDA wants to help them with their managerial skills, for them to have the necessary technical skills. He said that the challenge for the PQF is that currently, there is no certification for level 5. He added that based on the presentation of Ms. Sakamoto, technology transformation should be embedded in the qualification and skills enhancement of workers including farm managerial skills such as in doing case analysis and problem solving skills.

Ms. Gigi Pontejos-Morris said that it is important for small-scale farm owners, farm schools, agri-TVET providers to be able to understand the different levels in the PQF, AQRF, and be certified so that we may competently pass on the knowledge and also to be able to progress to higher, managerial levels.

Mr. Bares asked whether a country or AMS is allowed not to use the AQRF. Ms. Isaac replied that indeed, AMS are not bound only to the AQRF, it depends on the country and its decisions, some countries like Malaysia use the New Zealand referencing process and the Philippines’ Commission on Higher Education is referencing with New Zealand as well on occupational standards for Nursing.

Ms. Sakamoto gave a comment and said that it is also important to enhance the element of core competency in workers so that there is a growing need for skills competency in higher levels and not complacent in lower levels.
Mr. Elmer Talavera asked whether there was any follow up studies or interventions done in the India study. Ms. Sakamoto replied that it was very difficult to chase and trace the workers because of the study’s design, and only two rounds of follow up calls were done. But she emphasized that it is not only certification that is important. In the long term, there are other aspects as well, like a broader support for agricultural workers that are more important.

Mr. Justimbaste said that agriculture is unique, there are so many information and aspects to learn and different trainings to undergo but these should be all translated into learning outcomes.

Ms. Isaac added that in ASEAN agriculture, the certification of micro-credentials is most applicable and needs to be considered and studied.
SESSION 2: COMPETENCY CERTIFICATION FOR AGRICULTURAL WORKERS IN SELECTED COUNTRIES

Moderator: Mr. Elmer Talavera, Executive Director, National Institute for Technical Education and Skills Development

MR. IR SURONO MPHIL
Member of the Board, Badan Nasional Sertifikasi Profesi (BNSP), Indonesia

Mr. Surono, who delivered his presentation via Skype, enumerated the laws and regulations that govern the NQF system of Indonesia. He cited Law No. 19 in 2013 on the protection and empowerment of farmers; Government Regulation 10 in 2018 about the BNSP (Indonesia Professional Qualification Authority); Presidential Decree No. 8 of 2012 on the KKNI (Indonesian NQF); and Presidential Instruction No. 9 of 2016 on the revitalization of vocational in senior high school. All these are geared to help address the growing needs of competency certification in the agricultural sector as it is one of 12 sector priorities in the ASEAN Economic Community blueprint. Being followed also are the ASEAN Guiding Principles for Quality Assurance and Recognition of Certification System, and the Regional Model for Competency Standards (RMCS) 2016.

In terms of developing competency, there is Education in Agriculture offering vocational, diploma, professional, and academic programs, and Trainings. This leads to competency certification once qualified against competency standards.

The BNSP, taking into account government regulations, ASEAN guiding principles, ISO 17024, and RMCS, in coordination with industries and other agencies, licenses LSP (Professional Certification Body) to verify and accredit TUK (Assessment Venues) using the same quality assurance principles. The TUK is the implementer of Certification Schemes and Good Workplace Practices. They then certify the worker based on competency standards. There are three kinds of certification: National Qualification, National Occupations, and Cluster of Competencies.

He cited three reasons for the growing need for competency in the agriculture sector:

1. Certification of occupation, to develop personal branding for entrepreneurship of young people;
2. Consumers need assurance or guarantee for online purchase of products and services; and
3. Promotion of workers’ competency in the labor market.

In the development of TVET system, he stated five standards:
- Competency standards which are statements of knowledge, skills and/or competence linked to a job;
- Occupational standards which are statements of activities and tasks related to a specific job and its practice;
- Certification standards/scheme which are statements of learning outcomes to be assessed and the methodology to be used;
- Assessment standards which are rules for obtaining an award and the rights conferred; and
- Educational standards which are statements of learning objectives, content to be addressed, entry requirements and resources required.

Mr. Surono said that the Indonesian National Competency Standard is based on the RMCS 2016. These standards can also be used to:

- Inform curriculum design. Although they do not capture the holistic education and training needs of learners, they do capture the key critical assessment requirements within a curriculum.
- Benchmark national and international qualifications. The use of competency standards creates a common fixed reference point against which equivalency decisions can be made. Using a common approach such as the RMCS makes such decision-making easier.
- Recognize skills. The RMCS provides a good bases for accepting and acknowledging levels of skills and qualifications between and among institutions and countries.
- Plan career progression. This provides coherence to the skills requirements within a sector. It allows a person to plan a career and also identify areas where he or she can transfer knowledge skills and expertise across roles and settings.

He reported that the Indonesian NQF has 9 levels. Description of each occupation is identified in this framework which is being aligned with the AQRF.

He cited issues facing the growing needs of competency certification:

- Need for competency standard in all areas of agriculture sectors,
- Lack of occupational standards,
- The need for more training programs to be professional in all areas of agriculture, and
- Budget to facilitate human resources in agriculture for them to access certification.

To help address these issues, he cited Alternative Acceleration Strategies:

1. Rapid Need Assessment: mapping of occupations within Qualification Framework holistically in agriculture sector/functional area (key function area and major function area):
   - Identification of descriptions of occupations (definitions, profiles, responsibilities, and job tasks)
- Identification of the availability of competency standard for each stakeholder verification
- Occupational map within Qualification framework
- Formulation SKKNI based on Occupation map.

3. Development of assessment tools.
4. Encourage Education and training to integrate the certification scheme with their learning outcome.

He identified key functional areas or disciplines in terms of agriculture:

- Cultivation,
- Livestock production,
- Animal health,
- Agrotechnology, and
- Agribusiness.

In closing, Mr. Surono mentioned further work to do in these areas:

- Development of certification schemes and standards,
- Development of assessment tools, and
- Integrating certification schemes in education and training instructional design.

Ms. NELIE LLOVIDO
Chief, Competency Assessment Division, Certification Office, TESDA, Philippines

Ms. Llovido reported that Philippine’s Republic Act No. 7796, otherwise known as the TESDA Law created the TESDA to manage Technical and Vocational Education and Training (TVET) in the country, authorizing the agency to develop and establish a national system of skills standardization, assessment and certification system.

She described the Philippine education system as comprising of Kinder (one year), Primary (six years), Secondary (four years plus 2 years of senior high school or TVET Specialization NC I and NC II) and Tertiary (includes TVET and Baccalaureate, Masteral, and Doctorate Programs).

She explained that the training regulations development process starts with their industry partners and associations which recommends priority sectors and associations which are then deliberated on and promulgated by the appropriate committees of the TESDA Board.
Ms. Llovido said that Training Regulations refers to the package of competency standards, training standards, and assessment and certification arrangements which all are developed by the industry and approved by the TESDA Board.

She enumerated some of the training and assessment programs for agricultural workers that leads to the issuance of certification:

- Barangay Kabuhayan Skills Training Program (BKSTP),
- Competency Assessment and Certification for Workers (CACW),
- Private Education Student Financial Assistance (PESFA),
- Program on Accelerating Farm School Establishment,
- Special Training for Employment Program (STEP), and
- Training for Work Scholarship Program (TWSP).

She reported that there are more than twenty (20) training regulations developed and more are being developed ranging from NC I to NC IV. To assure quality she added that there are two programs or systems in place, one is TVET Program Registration which has two operating procedures, and in the other, Assessment and Certification which is enshrined in the Philippine TVET Competency Assessment and Certification System, there are six operating procedures. The two programs are ISO Certified.

She described the Competency Assessment and Certification System that starts with the Development of Competency Standards in collaboration with industry experts and associations other national government agencies. This leads to the Development of Competency Tools again with the help of industry experts and the academe, which requires the approval and promulgation of the TESDA Board. Guidelines are then prepared for the Accreditation of Assessors and Assessment Centers. They then Conduct Competency Assessment leading to the issuance of Certification. If there’s a need to revisit the standards, the industry partners will signal the TESDA.

She showed two certificates of recognition that they issue. One is a National Certificate which is issued to individuals who have achieved all the required units of competency of a national qualification defined under the promulgated Training Regulations. The other is a Certificate of Competency issued to individuals who were assessed as competent in a single unit or cluster of related units of competency.

Ms. Llovido reported that to date there 326 accredited assessment centers and 631 accredited competency assessors. She stated that the agricultural sector has to be mobilized; only a small portion of 1.2 million assessed and issued certification are from the sector.

She reported that the Philippine Qualification Framework (PQF) has eight levels but it doesn’t mean that it is 1:1 with the AQRF; the PQF is a work-in-progress. She added that the PQF is already a law signed in 2016 three agencies, the Department of Education, TESDA, and the Commission
on Higher Education are mandated to implement it. In ending, she stated that all the elements in the Philippine TVET system are quality-assured and ISO-Certified.

Open Discussion

Ms. Bessie Burgos said that the Philippines is referencing itself with AQRF and Indonesia with RMCS as well, she asked if there are attempts of mutual recognition between countries on a particular agricultural sector. Ms. Llovido replied that as far as agriculture is concerned there is no mutual recognition yet. However, as the ASEAN guiding principles are already approved by the AMS, there are already initiatives to discuss and work on the ASEAN guiding principles on skills recognition. Indonesia has been very active on this. For agriculture, it is already being looked at.

Mr. Talavera said that there is the ASEAN Competency Standards for Tourism Professionals (ACSTP) and there is already a system of assessment and certification among AMS. He suggested that for agriculture, AMS may study this system especially for agro-tourism such as between Philippines and Indonesia.

Mr. Robert Acosta asked about the distribution of TESDA-certified TVET institutions in the Philippines and in Indonesia, their distribution among provinces across the country.

Ms. Llovido replied that in the Philippines opening a TVET institution is a market-driven activity so they don’t prescribe any number, though there are a number TESDA-supervised institutions. TESDA’s role is also to provide the policy environment so that agriculture and tourism can also grow as a pathway.

Mr. Talavera stated that there are currently 269 training regulations in the Philippines of which 21 is on agriculture, as for the assessed and certified workers, only nearly 2 percent is from agriculture. But with the advent of 1,900 farm schools, it is hoped that there will be more agri-TVET providers blossoming in the country.

Mr. Ariodear Rico mentioned the rigorous process to become a certified assessor in the Philippines, he asked how it is in Indonesia. Mr. Surono said that they have three types of assessors: one is the Assessor of Competencies, another is the Master Assessor, and the Lead Assessor. He added that Indonesia is also using the ACSTP for tourism.

Ms. Llovido agreed that there are similarities between the countries; the Philippines is also working on the Master Assessor, these are the assessors of Assessors.

Ms. Burgos inquired whether TESDA and BNSP allow “assessment only” services outside and separate of training services. Ms. Llovido said that for TESDA there are two pathways, one is the assessment only pathway, the other is the training and assessment pathway. The former is very strong on the recognition of prior learning, at the moment RPL is being strengthened as a pathway for recognition, equivalency, and articulation. Mr. Surono said that Indonesia also
provides assessment-only services. As a follow up question, Mr. Justimbaste asked whether Indonesia considers that as a recognition of non-formal and informal learning. Mr. Surono replied in the affirmative.

Mr. Justimbaste inquired on the cost of certification, how much cost will a farmer or worker incur to obtain certification. For the Philippines, Ms. Llovido replied that the cost for agriculture-related assessment ranges from PhP400 to PhP500 while certification is PhP50, both of which is valid for five years. In Indonesia, Mr. Surono said it is about $40 to $80 but subsidized by the government.

**MS. JULLADA MEEJUL**  
**Director, Bureau of Professional Qualification Management, Thailand Professional Qualifications Institute (TPQI), Thailand**

Ms. Meejul reported that there are two government agencies with regards to competency certification in Thailand. One is the Department of Skill Development in the Ministry of Labor, and the other is the Thailand Professional Qualifications Institute and only TPQI is working on the agricultural sector.

TPQI is a public organization under the Prime Minister’s supervision and working under the Royal Decree. The Governing Board includes the following:

1. Permanent Secretary of Ministry of Labor,
2. Permanent Secretary of Ministry of Industry,
3. Director-General, Department of Skills Development, MOL,
4. Secretary General of Office of Vocational Education Commission,
5. President of Thai Bankers Association,
6. President of Federation of Thai Industries,
7. President of Thai Chamber of Commerce, and
8. Two renowned experts (Industry and Education).

She stated that the objectives of the TPQI include developing professional qualifications system, supporting industries in setting competency standards, accrediting and monitoring Assessment Centers, awarding professional qualifications, developing a comprehensive professional qualifications database, and collaborating with education institutions, training institutions, enterprises, government and non-government agencies to promote competency standards and professional qualifications systems.

The system starts with identifying the priority sectors with the help of industries, workforce, and relevant agencies. Occupational standards are then developed with the help of consultants and relevant industrial sectors. Against these standards, workers undergo competency-based

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assessment in certification bodies or assessment centers. If there are gaps in the skills of workers, they can undergo gap-fill trainings. Once they are assessed as competent, they are issued Certificate of professional qualifications or statement of attainment to pursue their chosen career. She said that educational institutions can develop their own competency-based curricula using TPQI-developed occupational standards.

She emphasized the importance of stakeholders in the development of these occupational standards. These are developed for sectors that are vital to economic growth and that employ a large number of workforce. They collaborate with industries to set competency standards with the help of academics to research industries, synthesize opinions of industries’ representatives, and put them in template requirements. They have completed standards, including agriculture and aquaculture, for 545 occupational standards and is currently working on standards for more sectors. The goal is to set standards for 72 sectors (more than 700 occupations).

She reported that there are occupational standards for palm oil, rubber, rice, and sugarcane. For 2018, standards for plantation system and processing for rubber, integrated farming, monoculture single breed of farm animal and fishery, smart farming, and agricultural extension work to provide management and advice are being looked into.

Currently, TPQI has accredited 162 assessment centers for 48 areas and since 2014, around 30,000 people were assessed. Their systems are ISO-Certified as well in terms of quality assurance. She showed that Professional Qualifications Framework is aligned and benchmarked with Thailand’s National Qualifications Framework, currently being referenced with the AQRF, and has 8 levels and each level has its descriptors.

Open Discussion

Ms. Bing of TESDA inquired how TPQI chooses the assessors. Ms. Meejul said that TPQI studies first who the stakeholders are, their roles, and conducts workshops with them. In setting the competency standards, they work with most of the stakeholders and representatives from industries. The whole cycle takes more or less one and half years to complete all levels of qualifications standards-setting.

Mr. Rico shared that the information that the Philippines has the Professional Regulations Commission that regulates about 42 professions and they issue license to professionals. He said he hopes activities be supported like benchmarking and referencing with, as well as licensing later on for Thailand.

Mr. Acosta inquired on the smart farmers program of Thailand if are there available informational materials about it. Ms. Jullada replied that it will start in six months and she currently has no materials about it.

Mr. Justimbaste said Thailand’s is a monolithic unitary system and this is the beauty of the system. He asked who sets fees. Ms. Meejul replied that TPQI sets the fees ranging $7-$100, but
subsidized by the government, however, workers may avail of the subsidized fee only once. Government also pays private assessors.

Mr. Acosta asked which countries Thailand have benchmarked with. Ms. Meejul said that they have benchmarked with Indonesia on spa standards and Cambodia on automotive services.

Mr. Justimbaste asked whether TPQI recognizes non-formal and informal learning. Ms. Meejul replied in the affirmative.
SESSION 3: EXPERIENCES, ISSUES AND LESSONS IN PROMOTING COMPETENCY CERTIFICATION FOR AGRICULTURAL WORKERS

Moderator: Mr. Edicio Dela Torre, Chairperson, Education for Life Foundation and Former TESDA Director General

DR. HJ MOHD ZAMRI BIN HJ SABIL
Center Director, SEAMEO Regional Center for Vocational and Technical Education (SEAMEO VOCTECH), Brunei Darussalam

The educational system is the foundation of a country. A well-established system should identify and recognize the diversity of the talents of students. Some students do very well in skills and practical work and some do not. All students are important to the welfare of a country and even less-educated ones play a role in development; their talents should be emphasized and recognized.

One challenge being experienced in TVET is about educators and trainers. Most trainers are not exposed to industry, most are scholars from universities. There’s a mismatch between what are being taught in schools and what are required by the industries. So what they do is to send or expose their trainers every three years for at least six months to industries to learn and update them of industry skill requirements.

ENGR. ARIODEAR RICO
Chairman, ASEAN Cooperation on Agricultural and Biosystems Engineering (ACABE) Coordinating Committee

The Philippines is one of the founders of ACABE in 2013 of which it is the current chair. Mr. Rico presented three components:

Component 1: ACABE networks with the ASEAN Ministers of Agriculture and Fisheries and have presented ACABE’s framework for approval.

Component 2: Benchmark and harmonize basic, higher education, and technical-vocational education among AMS.

Component 3: ASEAN Mutual Recognition Agreement on Engineering Services, and on the AQRF.
Competency and Skills Certifications are done on two levels, one is on Professional level where licenses are issued, and the other is at the Tech-Voc level where they have training regulations and assessment systems.

He reported that TESDA has training regulations on ABE in the Philippines. They will also set up Agricultural Machinery Service Centers where they have TESDA-certified machinery operators and technicians. He also cited the National Agricultural and Biosystems Engineering Career Progression and Specialization Program under Republic Act No 10915 or the Philippine Agricultural and Biosystems Engineering Act of 2016.

ENGR. RENATO DELA CRUZ  
Chief, Partnerships and Accreditation Division, Department of Agriculture-Agricultural Training Institute (DA-ATI), Philippines

The ATI’s program is anchored on Philippine President Rodrigo Duterte’s pronouncement to provide available and affordable food for every Filipino, and on the Philippine Development Plan 2017-2022, Chapter 8: Assist the Filipino farmers and fisherfolks to become competitive and engage in productive and sustainable agriculture and fishery programs.

Training Packages in Agriculture, Fisheries and Natural Resources have these objectives:

- Enhancing Access to Agriculture and Fisheries Extension (AFE) Knowledge Products and Services
- Strengthening Competitiveness and Capacities of the AF Sector
- Expanding Partnerships in Advancing Excellence in AFE Delivery
- Scaling-Up AFE innovations
- Strengthening AFE Stakeholders’ Capacity in Climate Change Resilience and Disaster Risk Management
- Improving Enabling Environment and Quality of Governance

All the stakeholders in the value chain including input supply, production/harvesting, processing/distribution, marketing, and consumption are being capacitated by the ATI.

Mention was made about the partnership between TESDA and DA in giving training, competency assessment and certificate to Agricultural Extension Workers (AEWs) and qualified farmer graduates who will pass the assessment. ATI’s other functions were enumerated as follows:
• Upgrade the quality of agriculture related training programs,
• Provide technical assistance in the implementation program activity,
• Source out funds from partners to sustain the program,
• Develop a sustainability plan for the continuing education as well as capacity enhancement and professionalization of AEWs and farmer leader graduates,
• Monitor the progress and accomplishment of the project and performance of the institutions involved,
• Expand the availability of agriculture-related tech-voc training courses for farmers and members of their families, and
• Expand the access of rural farm youth of agriculture–related tech-voc courses.

Current programs of ATI in competency certification:

• Crop Production (NC II)
• Food Processing (NC II)
• Horticulture (NC II)
• Organic Agriculture (NC II)
• Rice Machinery Operation (NC II)
• Animal Production (NC II)

Other relevant initiatives of DA-ATI include the following:

• Establishment of Learning Sites (LS), School for Practical Agriculture (SPA) and Accreditation of Private Extension Service Providers (ESPs). TESDA accredits LS, SPA, and ESPs as Farm Schools.
• Close collaboration with the Department of Tourism in formulating the Implementing Rules and Regulation of the Farm Tourism Law.
• Partnership with the Philippine Association of Agriculturists Inc. (PAA) in the implementation of Continuing Professional Development (CPD) for Philippine Agriculturists (ATI is accredited by PAA as a CPD provider).

Engr. Dela Cruz mentioned some of the issues and lessons of DA-ATI:

• Extension professionals must be aware of the changing tools and approaches to extension to be able to assess and select the appropriate tools and approaches that suit the conditions they work in.
• As extension professionals AEWs will deal with many challenges such as climate change, helping farmers to access high value markets, organizing farmers into groups, dealing with issues related to natural resource management and marketing.
• It is more important than ever before to professionalize extension services and efforts are underway to put standards and certification in place.
• Extension workers must be competent in technical area of their job in terms of knowledge and skills in new technology.
• Current curriculum (design content and assessment tests) is heavily focused on concept and theories but lacks practical application. A simple, focused, updated and progressive curriculum is recommended.
• In competency certification policy, and all matters of governance, interagency coordination has always been of paramount importance.

DR. ROBERTO ACOSTA  
Resource Mobilization Manager, East West Seed

Dr. Acosta stated that East West Seed is part of East West Seed Group, a multinational company, number 1 tropical vegetable seed company in the world and 8th among seed companies in the world, founded by a Dutch entrepreneur and Benito Domingo in the Philippines thirty seven years ago.

In terms of experience, he said that the Dutch does not rely on certificates that a person has and values more the person’s capacity to do the job and task at hand, his practical skills. Also, since they are a seed company, there are currently no available certification for seed jobs.

All East West Seed company personnel undergo training in their in-house academy.

Their seed growers are contract growers, even the micro growers or farmers. They have to develop practical learning and they undergo continuing skills development program to adjust to challenges in seed production.

In terms of their vegetable growers, they are last-resort farmers who don’t have much education, therefore they don’t have formal training in vegetable production. This becomes a barrier, so they implemented a technology/knowledge transfer program. He said that they are looking into current certification programs and their staff undergoes the same.

MS. GIGI PONTEJOS-MORRIS  
Farm School Director, MoCA Family Farm Learning Center, Philippines

Ms. Pontejos-Morris narrated that their farm was destroyed by typhoon Glenda in 2014 and since both she and her husband are educators, they decided to offer agriculture TVET education. She had difficulty finding agri-TVET institutions in her area, she enrolled in a TESDA-accredited training and after 2 years she received her program registration. She has five programs registered in her school.

She said she later realized that providing training is not enough and there is the competency certification aspect. She pursued for their facility to be certified as an assessment center.
One issue she considers is the low number of assessment centers; the number of farm schools is increasing but there may not be enough assessment centers. She mentioned three aspects of education that are very important:

1. Equity which means education for all;
2. Quantity which means to reach as many people as possible; and
3. Quality which has to be assured, otherwise competency certification will be affected.

Open Discussion

Ms. Morris added what she considers a learning experience, which is respect for the processes of accreditation/certification because if you undergo the process, you will have a “leg to stand on” when you offer agri-TVET training and certification to prospective clients.

Mr. Acosta said that sometimes circumstances force people to learn. He recounted that during Typhoon Haiyan, coconut farmers in Leyte were forced to learn to plant vegetables as a means of survival. Father Dela Torre agreed that when need arises, a disaster or a disadvantage can turn into an advantage.

Engineer Rico said that since the Philippine government is embarking on a large mechanization program, the issue of low-skilled and aging workers needs to be addressed. Therefore, it is but practical to go into higher-value training activities such as tractor operation and maintenance. This is also one way of attracting the youth to go into agriculture using high-technology tractors and machineries.

Mr. Zamri narrated that they have a program for enticing the youth to go into agriculture by using social media to promote pathways to agriculture. They also encourage people to visit them to learn what they are doing, they use success stories, and conduct job fairs to match students of their training programs with industries.

Engineer Dela Cruz said that the School for Practical Agriculture, a cooperator of ATI, practically does extension work capacitating farmers. He reported that the ATI technical staff are required to undergo training and be certified as NC III to capacitate them before training others. He said that the devolution law poses a challenge to doing extension work; there should be some form of capacity-building in agriculture for local government executives. Farm schools also mainstreams agribusiness to the youth, increasing their chances of being employed, through the 4-H Club of the Philippines. Another challenge is to expand and capacitate more competent assessors and assessment centers to be able to cater to the demand of farm schools.

Questions and Comments from the body:

Mr. Conrad Bares said that he came up with formula: certified seeds plus certified workers equals competitiveness. He explained that by using certified seeds which can guarantee a twenty five
percent increase in yield and with the contribution of the skills of certified workers, he wondered if this can lead to better productivity.

Mr. Acosta said that East West supports agri-entrepreneurship as one way of showing people that there is big income potential in farming. He emphasized that performing well the job is also as important as having qualifications and certifications.

Mr. Dela Torre asked Ms. Meejul how Thailand promotes vegetable consumption among its citizens. Ms. Meejul said that they naturally consume vegetables because of what they have. However, the government is promoting the consumption of fruits promotion. The government is partnering with Alibaba, an internet-based retail company, to facilitate online purchases, for example, 100,000 pieces of durian were sold ten minutes after being offered online in China. Other agricultural products are being offered as well.

A participant from TESDA reported that they have already developed training regulations, together with the Department of Agrarian Reform, for agri-entrepreneurship. She said that this is what farmers need such as in marketing their products and farm accounting and financial literacy.

Engineer Dela Cruz said that their Secretary’s instruction is to move away from subsidy and go into easy-access loan for farmers, so this will also involve trainings on farm record-keeping and financial literacy on the part of the farmers.

Mr. Acosta’s final suggestion is to think of the big picture and make a business out of sustainable agriculture. Mr. Zamri meanwhile said that the educational system is very important, to upskill and reskill the workforce, however, the educational system cannot do it alone, every stakeholder needs to collaborate with each other on some sort of holistic, “whole of government” approach. Ms. Morris said that there’s a new breed of family farmers like the Overseas Filipino Workers who have huge potential and economic impact; they should be nurtured. Engineer Rico said that in the system, there should be a provision for career progression. Personnel officers and human resources management officers must also be educated on the different levels of certification (e.g. NC I, NC II).

In his final note, Mr. Dela Torre said that the government policy is to promote agriculture and rural development. It is its first promotor and the driver. Devolved government extension workers should be trained and certified properly to become trainers and assessors in agriculture.

Secondly, how do we make agriculture one of the options for the youth? It is not just the financial returns that will make agriculture “cool”, other factors such as climate change, environment, health, equipment and machineries, technology, all these are part of a multi-faceted approach to attract the youth and new breed of farmers.

Agriculture and rural development will contribute greatly to the future of the economy. Let’s start within our own institutions and be certified trainers and assessors. The ASEAN
harmonization will not only make AMS members compete with each other, but also complement each other.
SURVEY

A survey was conducted among the participants to gather additional information about the topic at hand which they feel are equally important and relevant and they want to share but were not able to articulate it during the discussion due to time constraints. They were directed to a website in their emails for them to be able to participate in the survey. The questions that participants were asked and the results of the survey, as well as their comments, are as follows:

Name:
Institution:

1. Do you agree that there is a compelling case for expanding skills recognition for agricultural workers?
   - □ Yes
   - □ No
   - □ I don’t know

2. Do you think that competency certification systems can be expanded to include recognition of non-formal and informal learning of agricultural workers?
   - □ Yes
   - □ No
   - □ I don’t know

3. Do you think TVET institutions play an important role in the recognition of non-formal and informal learning among agricultural workers?
   - □ Yes
   - □ No
   - □ I don’t know

4. What barriers or problems would TVET institutions face in expanding competency certification systems to include recognition of non-formal and informal learning of agricultural workers?
   - (Open ended question)
5. Do you think private enterprises, NGOs and farmers’ organizations are willing and able to collaborate on recognition of non-formal and informal learning of agricultural workers?

☐ Yes
☐ No
☐ I don’t know
Regional Workshop on Competency Certification for Agricultural Workers in Southeast Asia

Survey Results

1. Do you agree that there is a compelling case for expanding skills recognition for agricultural workers?

2. Do you think that competency certification systems can be expanded to include recognition of non-formal and informal learning of agricultural workers?
3. Do you think TVET institutions play an important role in the recognition of non-formal and informal learning among agricultural workers?

4. Do you think private enterprises, NGOs and farmers’ organizations are willing and able to collaborate on recognition of non-formal and informal learning of agricultural workers?
5. What barriers or problems would TVET institutions face in expanding competency certification systems to include recognition of non-formal and informal learning of agricultural workers?

Showing 35 responses

TVET is a formal education pathway in the whole scheme of the national education system. It also promotes lifelong learning through continuing education and training through formal education. For informal and non-formal certification could be handled by related authority/agency that overlook agricultural industries.

9/05/2018 3:37 AM

Lack of qualified trainers and assessors due to migration to other agencies. Less enrolment to agriculture qualifications.

9/05/2018 3:43 AM

There is a compelling need to train and accredit competent assessors and establish assessment centers. Review of existing curriculum that will respond to the needs of the agriculture sector particularly the mainstreaming of youth in farming, with the pluralistic nature of extension, a strong and coherent coordination among stakeholders is of utmost importance.

9/05/2018 3:57 AM
One of the major challenges for the TVET institutions on this endeavor is the backboning in preparation for the expansion of competency Certification systems that includes facilities and manpower requirements. Another is the need for paradigm shift from the traditional mindset of not recognizing the importance of the agriculture sector mainly among the millennials. That is why there is a need for a technological transformation in the agriculture sector to make it more attractive to the young people especially that there is an aging population of our farmers today.

To develop common skills standards for selected occupations in agriculture under regional qualifications framework. Based on that harmonization of standards member countries would implement mutual recognition of skills and qualification in those occupation.

1. Access to relevant information 2. Accessibility by the target population, specially those coming from far-flung areas, including small island communities 3. Other associated costs that comes with certification not cove

Lack national policies to recognize the contribution and equal status of non-formal and informal learning in comparison with formal learning.

Lack of funding, human resource and legal frame work

Farmer don't realize in competency. They think they can do by themselves.

resistance of farmers who are not open to new opportunities, extra efforts to advocate certification of agri workers.


- characteristics of agricultural workers - level of education or literacy and numeracy to undergo competency assessment - need to link the competency standards & certification with existing international or regional agricultural product standards or practices

44
Lack of assessors, lack of CAC office staff would entail additional fund requirement for its implementation; so much so that our assessors are at the same time trainers who will be occupied with the implementation of FREE EDUCATION

9/05/2018 4:47 AM

The willingness and attitude of farmers towards competency assessment. Budgetary requirements. Registration of applicants for assessment through T2MIS (which is slow and sometimes can't be accessed).

9/05/2018 4:48 AM

The willingness and attitude of farmers towards competency assessment. Budgetary requirements. Registration of applicants for assessment through T2MIS (which is slow and sometimes can't be accessed).

9/05/2018 4:49 AM

Maybe not a barrier but a bit of difficulty in the implementation due to the location of Agri TTIs who serve as assessment centers nationwide were not strategically designed. The scarcity of assessors in areas with available standards and likewise the development of assessors for newly emerging agri qualification. Truly, the collaboration with the Agri workers to serve a partner in crafting the standards and the increasing number of Farm Schools nationwide are some of the keys to ease the achievement of the purpose for agri sector. Finally, I'm happy to note that were heading the right direction and desires together with our ASEAN brethren. In General aspect, the certification system is implementable...

9/05/2018 4:49 AM


9/05/2018 4:50 AM

- characteristics of agricultural workers - level of education or literacy and numeracy to undergo competency assessment - need to link the competency standards & certification with existing international or regional agricultural product standards or practices

9/05/2018 4:53 AM

At the level of institutions, they should first determine through institutional assessment if learners can be given RPL through portfolio and/or performance and/or written assessments. This should be part of the operational procedures of the accepting institution which others might not want to implement. But this is just institutional RPL in which the learners do not have to go through the modules they have been found to be competent. But National Certification in our country is done separately not by the trainer of the institution and not the trainer conducting competency assessment to his/her own students since there will be a conflict of interest in this regard. Assessment for National Certification should be conducted in a TESDA Accredited Assessment Center. Another problem since the learner, for example, has been found to be competent in a given unit of competency there must be corresponding adjustments made in the payment of tuition fees. There should be a policy at the institutional level to orient prospective enrollees in the RPL to give due recognition to non-formal and informal learning. Another barrier which an institution might not accept is that when a Certified student wants to enroll in an institution since his/her employer is demanding a Transcript of Record or Certificate of Training most likely the institution, especially those in the private sector might not be willing to issue him/her a Transcript of Records or Training Certificate outright. If yes, there might be fees involved e.g. paying the tuition fee even though it is through RPL.
Some problems and issues that need to be addressed for strengthening Agricultural workers certification systems are inadequate competency trainer, assessor, training and assessment center for agricultural specialization.

Because of a very low assessment cost, institutions are not encouraged to establish assessment centers to conduct only assessment services to recognize prior learning.

1. The cost of certification is still too high, especially for prospective workers who will graduate from vocational schools. 2. Not all industries have received competency certification because of the additional requirements of special competence in the industry. 3. Consequences on the rise of salary/wage of labor that has a certificate of competence. 4. The needs of a very large budget especially the procurement of facilities and infrastructure education and training and competence testing process as a consequence of achieving the ability of standardized workforce. 5. The mindset of people who do not understand the benefits of competence certificates for the improvement of prosperity and global demands.

Validating/documenting the non-formal/informal learning. Although there are also ways to address this challenge especially with the assistance of the extension service workers who work directly with the farmers. Validating can also be done through farmers' association or network where they belong and even from their local municipal agriculturist office. There is also the need for alignment of standards among agencies that work with our farmers, like DA-ATI in their training can have "micro-qualifications" certification that can lead to TESDA certificate of competency or even national qualifications.

Lack of TVET Competency Assessors and Trainers

Quality assurance system must be robust and trusted by industries.

1. Development of teaching staff to make sure the best learning outcomes to fulfill the industries need. 2. Need certain understanding and sequencing between minimum salary/system cost/job opportunities/shifting technology etc.

There could be difficulty in the process of giving credit to non-formal and informal learning. Another is the availability of competency assessors and accredited assessment centers.

9/05/2018 6:09 AM

1. Funding/TVET is expensive 2. Support from the government 3. Culture/ low acceptance/attitude of people towards TVET

9/05/2018 6:15 AM

Lack of assessors; no defined set of standards

9/05/2018 6:31 AM

- capacity of TVET institutions in doing certification - lack of assessors in agriculture

9/05/2018 6:38 AM

Capability / Capacity of human resources

9/05/2018 6:49 AM

Assessment requirements on trainers and assessors requirements on 3 years industry experience and others

9/05/2018 7:31 AM

The challenging parts are resources, facilities and competent and experienced trainers and assessors to comply with the requirements of quality TVET offering-both training and assessment.

9/05/2018 7:32 AM

- Time constraint - Informal learning workers less interest in competency certification system since it is only their daily work routine and they need less work time. -In other words, there are reluctant to adapt with the system, and its typically does not lead to certification - Its a lengthy process and need a specific a tools for recognition - It will be a challenge for a policy makers and for practitioners.

9/05/2018 8:14 AM
SESSION 4: RECOMMENDATIONS TO SEA-TVET HOM TO ACCELERATE THE PROCESS OF SKILLS RECOGNITION FOR AGRICULTURAL WORKERS IN THE ASEAN REGION  
Facilitator: Mr. Bernie Justimbaste

This is a plenary discussion of the possible recommendations that the workshop participants want to put forward during the SEA-TVET HOM. A working paper was offered to the body which was discussed and deliberated upon by the plenary. There was also an agreement to submit within one week other comments and suggestions to the draft resolution. Taking into consideration and incorporating all the comments during the discussion, the Resolution below was agreed upon by all the participants to recommend to the HOM.

RESOLUTION OF PARTICIPANTS

Whereas, the transformation of the ASEAN economies into a single market and production base necessitates the adoption of a strategy to promote lifelong learning and re-skilling, particularly for smallholders and waged workers in agriculture.

Whereas, the driver to promote lifelong learning and re-skilling is to recognize non-formal and informal learning through competency certification systems.

Whereas, the AQRF gives prime importance to recognition of non-formal and informal learning.

Whereas, lifelong learning re-skilling, up-skilling and competency assessment and certification are within the purview of mandates of most, if not all, TVET institutions in the ASEAN region.

Now, therefore, be it resolved, as it hereby resolved by the participants of the Regional Workshop on Competency Certification for Agricultural Workers in Southeast Asia held in SEARCA Headquarters, College, Los Baños, Laguna, Philippines held on 9-10 May 2018 that the following recommendations be elevated to the High Officials Meeting of SEAMEO SEA TVET.

1. That competency certification systems in the region should include and feature the recognition of non-formal and informal learning particularly of small holders and waged workers in agriculture;
2. That TVET institutions promote lifelong learning and re-skilling and up-skilling specifically for small holders and waged workers in agriculture;
3. That TVET institutions purposively develop and expand their capacities to recognize non-formal and informal learning through existing competency certification systems;
4. That TVET institutions in promoting lifelong learning, re-skilling and up-skilling as well as in recognizing non-formal and informal learning, actively seek partnership and collaboration with varied interest groups, to include but not limited to, private enterprises, professional associations, government organizations specifically the agriculture ministries and agencies, non-government organizations and farmers’ and related associations; and
5. To consider and support initiatives promoting mutual recognition of skills or qualifications of agricultural workers.

CLOSING PROGRAM

MS. ROSANNA A. URDANETA
Deputy Director General, TESDA, Philippines

We have reached the end of our two-day workshop, but definitely not the end of our work towards advancing the state of agriculture in Southeast Asia through certification of our agricultural workers, which would eventually contribute to greater mobility in our region.

On the part of TESDA, as our contribution to the advancing the agriculture sector and making it more competitive, I would like to mention that NTESDP which is the blueprint of the TVET sector in the country. We have identified the agriculture as one its priority sectors. As you are all aware we are in the business of assessment and certification and we are now trying to expand our mechanisms to include recognition of prior learning thru portfolio assessment. We are also studying the possibility of doing industry-led assessment and certification. The greatest challenge to TESDA to this particular mechanism is coming up with recognition and accreditation process in awarding an industry association the authority to do assessment.

Aside from all those I mentioned, we have also endeavored the Program for Accelerating Farm Schools Establishment (PAFSE), which is an initiative together with the Office of Sen. Villar and DA to expand capacity of our agriculture sector. Through this we contribute to rural development by providing access to TVET for our farmers and fisherfolks. The PAFSE provides scholarship grants to farmers and fisherfolks to assist them in building the capacity and capability of their farms through various trainings on green skills development, new technologies and agro-entrepreneurship.

We see great potential for this program, thus, we would like to work with SEARCA in evaluating PAFSE and see how it could be improved it further. Like how these farm schools will advance – and eventually will be able to host the whole value chain in agriculture production process including mechanization of agriculture.

Thank you to our partner, SEARCA for co-hosting this event with us—Dr. Gil Saguiguit, Dr. Bessie Burgos, Ms. Nyhria and the rest of your team; our consultants, Bernie and Ed Bacani.

Sincerest thanks to our speakers: Akiko Sakamoto from ILO and Sec. Irene Isaac of the AQRF Committee; panelists from SEAMEO VOCTECH, ACABE, DA-ATI, East West Seed, Mocha Family
Farm; speakers from the competent bodies- Jullada Meejul of TPQI, Ir Surono MPhil of BNSP, and Nelie of TESDA; and moderators RD Conrad Bares and ED Elmer Talavera especially to our former DG Ed dela Torre. Thank you also to Usec. Eduardo Gongona for gracing our event.

Of course, I would like to acknowledge and thank our neighbors and colleagues from ASEAN: Brunei Darussalam, Cambodia, Indonesia, Lao PDR, Malaysia, Thailand, and Vietnam; the SEAMEO Secretariat and SEAMEO VOCTECH. I hope that we pursue further collaboration among our countries.

To my dear TESDA colleagues, thank you for your active participation.

With this, dear colleagues, I would like to thank all of you for your valuable contribution and inputs in this workshop. I hope that this workshop will help us in strengthening our respective country’s certification system in the agricultural sector.

**Commodore EDUARDO GONGONA (Ret.)
Undersecretary, Department of Agriculture, Philippines**

Usec. Gongona of the Philippines’ Department of Agriculture delivered a closing message. He showed an audio-video presentation entitled “Malinis at Masaganang Karagatan” (Clean and Bountiful Seas). The program is a search for Philippines’ Outstanding Coastal Community.

Technologies and markets exist. But there is a gap in financing. The government is providing financing mechanisms, filling the gap. Shift from subsidy to providing easy financing for agricultural activities. He said that by collaborating with TESDA, local government units, and other NGOs, this intervention can help spur agriculture and economic activity in the rural areas and generate income and employment.

The DA also is encouraging more processing and value-adding activities to achieve this. Make farmers and fisherfolk more skillful and earn higher incomes. He added that they are trying to lessen the number of intermediaries and improve the cold chain of commodities.

Municipal waters are also included in the program by capacitating local government units to take care of municipal waters in their jurisdiction, these are where big fish species usually spawn. In terms of aquaculture, the number of broodstock nurseries are being increased so there would be more supply of fingerlings.
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